

**14<sup>TH</sup> ANNUAL REPORT OF THE SECTION 106 PLANNING AGREEMENT  
BETWEEN BIRMINGHAM AIRPORT LIMITED AND  
SOLIHULL METROPOLITAN BOROUGH COUNCIL**

**EXECUTIVE SUMMARY**

This report has been written to give an update of the operations at Birmingham Airport Limited (BAL) in relation to the Section 106 Planning Agreement between Solihull Metropolitan Borough Council (SMBC) and the Airport Company, Birmingham Airport Limited (BAL).

The Section 106 Agreement consists of eight schedules. This report is laid out under the heading of each of the eight schedules in the order that they appear in the Agreement. However next year the report will be laid out in a new format to take into account the new Section 106 agreement for the runway extension which came into force in February 2013. The new format will include sections not currently reported on such as wake vortex, carbon management and Historic, Environment, Ecology and Landscape Management Plan.

The noise and track keeping system (ANOMS) used at BAL provides the latest technology for tracking aircraft and monitoring noise levels. A remote terminal has been installed for the use of the Airport Monitoring Officer based at Solihull Metropolitan Borough Council.

This report will also give an update on airport developments that have taken place at the Airport during 2012.

Ongoing monitoring has shown that the Airport Company continues to comply with its obligations in the Agreement. Any minor infractions have been reported and dealt with promptly by the BAL in full consultation with SMBC.

Compiled by Beverley Hill, Airport Monitoring Officer, Solihull Metropolitan Borough Council

**ACKNOWLEDGEMENTS**

I would like to acknowledge the assistance provided by members of staff at BAL and the Environment Agency

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## Glossary of Terms

Numbers in square brackets [ ] refer to references at the back of the report

**Airport Company** – Birmingham Airport Limited (BAL), operators of the aerodrome licence and legally bound by the Section 106 Agreement

**AMO**- Airport Monitoring Officer

**airside** - area of airport accessible only after proceeding through security checks, customs and passport control

**annual limit** - the yearly total of **ATMs** allowed during the night time period (2330 to 0600) (**exempt movements** are excluded)

### **ANITA-Airport and NEC Integrated Transport Access**

**ANOMS (Airport Noise & Operations Monitoring System)** - aircraft noise and tracking monitoring system used by **Birmingham Airport**

**apron** - areas of airfield used for operations and for the temporary holding of stationary aircraft

**ATF (Airport Transport Forum)** - BAL led forum to aid the development of a sustainable transport strategy. Set up in accordance with the DEFRA white paper "Developing an integrated transport policy" [1]

**ATM (Air Transport Movement)** - a landing or take-off of an aircraft engaged in the transport of passengers, cargo or mail on commercial terms

**AUN (Automatic Urban Network)** - government approved air quality monitoring sites which form part of the National Air Quality Monitoring Network. Specific pollutants are monitored and the results are available on the government's web site [2]

### **ASAS Airport Surface Access Strategy**

**BOD (Biochemical Oxygen Demand)** - a means of measuring water pollution using biological breakdown

**COD (Chemical Oxygen Demand)** - a means of measuring water quality using chemical analysis

**BCC** - Birmingham City Council

**BAL** - Birmingham Airport Limited

**CDA** - Continuous Descent Approaches

**Centro** - passenger transport executive for the West Midlands

**Chapter 2 aircraft** - older, noisier aircraft, such as the BAC1-11 and the Boeing 737-200 series (banned in the UK from end of March 2002) as defined in Annex 16 to the convention on International Civil Aviation [3]

**Chapter 3 aircraft** - quieter, more modern aircraft

**CDA**-Continuous Descent Approach

**dB (decibel)** - measure of sound that uses a logarithmic scale from 0 (threshold of hearing) to 140 (threshold of pain)

**dB(A) (A-weighted decibel)** - refinement of the decibel rating that matches more closely the way the human ear responds to different noise levels

**DEFRA** - Department for Environment and Rural Affairs

**DfT** - Department for Transport

**EA** - Environment Agency

**EPAQS** - Expert Panel on Air Quality Standards which reports to *Defra* and advises on health based targets for air pollutants

**EPNdB (Effective Perceived Noise Decibel)** - Allows not only for human sensitivity to different sound frequencies, but also takes account of the “perceived noisiness” of whistles, whines, etc. and the duration of a complete aircraft flyover.

**exempt movements** - *ATMs* may be exempt from night flying restrictions due to the following circumstances:

- aircraft diversions that have been brought about by changes in weather conditions at the original destination airport or an in-flight emergency
- aircraft on medical evacuation or mercy flights where there is danger to life or health, human or animal
- any take-off or landing in an emergency consistent with preventing danger to life or health
- delays to aircraft resulting from widespread and prolonged disruption to air traffic
- delays to aircraft that are likely to lead to serious congestion at the Airport or suffering to passengers or animals

**FDC** - flow diversion chamber

**full aircraft engine ground running** - engine running on the ground at 80 - 100% of engine power.

**IATA** - International Air Transport Association

**LA<sub>eq</sub>** - measure which averages out noise levels that fluctuate over a given time period, it is the average sound intensity expressed in **decibels**

**LA<sub>eq(16 hour)</sub>** - average sound intensity over a specified time period, e.g. daytime

**landside** - area of airport accessible to all visitors i.e. accessible before proceeding through security checks, customs and passport control

**modal share** - proportion of journeys to the airport by a particular type of transport (car, bus, train etc) and by category of user (passenger, employee etc)

**morning shoulder period** - 0600 to 0700 hours (0600 - 0800 on Sundays)

**Multi-modal interchange** - purpose-built area designed to allow easy exchange for passengers between different modes of transport e.g. bus, train, car

**NAQS (National Air Quality Strategy)** - Government initiative aimed at controlling air pollution.

**NEC** - National Exhibition Centre, Birmingham

**night period** - for the purposes of the night flying policy, 2330 to 0600

**NMT** - noise monitoring terminal. BAL has 7 fixed NMTs located in the local community and on the airfield.

**noise contour** - line on map connecting points where the same level of noise would be expected. The 2002 63dBA<sub>eq</sub> contour has been used to decide which properties are eligible for inclusion in the **Sound Insulation Scheme**.

**NPR (Noise Preferential Route)** - NPRs cover the first 3000 feet altitude of the *Standard Instrument Departure (SID)* routes (note: this applies only to Departing flights)

**passenger transport modal share** - the proportion of journeys to the Airport by public transport (bus, coach, rail)

**quota** - the yearly limit on the total of **quota counts** for all **ATMs** at the Airport in the **night period**

**quota count** - the amount of the **quota** assigned to one take-off or landing by an aircraft, as detailed in the noise classification for that aircraft type (see table 8)

**S106** - A legally enforceable contract between SMBC and BAL [4]. The term Section 106 refers to a section of the Town and Country Planning Act 1990 [5]

**SID (Standard Instrument Departure)** - standard instructions that aircraft pilots are required to observe on take-off over a particular en-route navigational beacon, produced by the CAA and published in UK AIP

**SIS** – Sound Insulation Scheme

**SMBC** - Solihull Metropolitan Borough Council

**SSSI** - Site of Special Scientific Interest

**start of roll** - position of an aircraft just before its take-off run begins

**TOC** - Total Organic Carbon

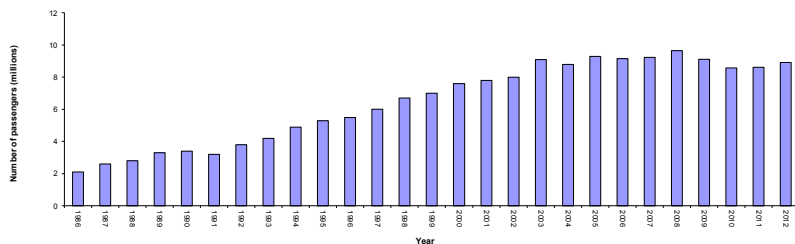
**INTRODUCTION**

In 1995, responding to increasing demand for air travel, the Airport Company applied for permission to expand its passenger terminal facilities. After consideration by SMBC's Planning Department, permission was granted subject to certain conditions designed to minimise the impact of airport operations on local residents and their environment. These conditions are set out in a Section 106 Planning Agreement published in July 1996 and amended in 2004. A new Section 106 Planning Agreement came into force on February 18 2013 (the official commencement of the runway extension development). The new 106 agreement will report on subjects not currently reported on such as wake vortex, carbon management, and Historic, Environment, Ecology and Landscape Management Plan. The old 1996 Section 106 Agreement is now superseded.

This document, the 14<sup>th</sup> Annual Report of the Section106 Planning Agreement, is laid out under the eight schedule headings as found in the Agreement in order to facilitate cross-referencing.

As far as practicable, the reporting period for this document has been aligned to the calendar year, with the report covering data from 2012. This enables comparison of environmental performance year on year. Figure 1 shows the growth in passenger numbers at the airport since 1986.

**Figure 1. Increase in passenger numbers at Birmingham Airport 1986-2012**



**AIRPORT MONITORING**

The role of the Airport Monitoring Officer (AMO) is to audit all aspects of the Section 106 Agreement. A work schedule for the AMO is detailed in Table 1, which shows the type of auditing work carried out each year. Additional investigations are undertaken in response to complaints or as proactive projects.

The AMO also acts as a point of contact for airport complaints, which are investigated in the context of the Section 106 Agreement. If the subject of the complaint is found to be within the restrictions applied to airport operations by the S106 Agreement, no further action is taken, and the complainant is informed of the situation. However if the subject of the complaint is found to breach any of the Section 106 Agreement Schedules, the matter is taken up with the Airport Company. To date there has never been such a breach.

In the first instance any environmental complaint relating to the Airport Company should be directed to the Government and Industry Affairs Team at the Airport who can be contacted in the following ways:

- By calling the Environmental Helpline on 0121 767 7433.
- By emailing [EnvironmentTeam@birminghamairport.co.uk](mailto:EnvironmentTeam@birminghamairport.co.uk)
- By visiting the noise section of the website [www.birminghamairport.co.uk](http://www.birminghamairport.co.uk)
- By writing to Government and Industry Affairs Team, Diamond House, Birmingham Airport, B26 3QJ

However in the event of continued dissatisfaction, the Airport Monitoring Officer should be contacted. For more information about the work of the AMO, the Section 106 Planning Agreement, general enquiries, or further help regarding a complaint, please contact Beverley Hill on 0121 704 6908 (Direct Line) or email [beverleyhill@solihull.gov.uk](mailto:beverleyhill@solihull.gov.uk)

**Table 1 Work schedule of AMO**

Schedule of Section 106	Proposed Work	Frequency
1. Land Use and Planning	Attend consultation meetings	When held
2. Highways and Drainage	Check compliance with Environment Agency consent	1 per annum
3. Noise Control	Side by side noise monitoring at Terminal 2	2 per annum
	Paper checks on Ground Runs	4 per annum
	Noise readings and sightings - tracked back to ANOMS	4 per annum
	Complaints audit	2 per annum
4. Night Flying	Noise monitoring	As required
	Paper checks	4 per annum
5. Air Quality	Compare BIA results with SMBC and UK results	4 per annum
	Complaints audit	2 per annum
6. Air Traffic	Observations on track keeping	4 per annum
7. Community and Environment	Check amounts transferred from night noise fines	1 per annum

## **1. LAND USE & PLANNING**

The Airport Company continues to comply with all six clauses of Schedule 1.

### **Runway Extension**

SMBC formally granted Planning Approval for the Runway Extension on 2 November 2009. SMBC has issued the Notice of Planning Approval (with 26 Planning Conditions) and the S106 Planning Agreement (with 16 Schedules of Planning Obligations). These are both available on the Airport Company's website. A new Section 106 agreement came into force in February 2013 which is the date that work on the runway extension itself commences. The new Section 106 agreement will include items not currently reported on such as wake vortex, carbon management and Historic, Environment, Ecology and Landscape Management Plan.

By extending the existing runway by 405 metres, aircraft will be able to take off from Birmingham with more fuel and fly direct to destinations currently out of reach, such as China, South America, South Africa and the West Coast of the USA.

The first part of the development involves the groundwork for the re-alignment of part of the A45. Construction work on this is well underway and this phase of the development is expected to be completed by June 2013. Once this phase has been completed the existing redundant section of the A45 adjacent to the Airport will be closed.

Excavations of the channel for Low Brook and Bickenhill Brook diversions have been completed and also new drainage works have been carried out. Whilst carrying out the re-alignment groundwork some ecological elements identified in the initial report required further actions, which have now been successfully completed. This includes a colony of white clawed crayfish which were successfully re-homed and the erection of a number of bat and bird boxes.

### **Other Developments**

A new "Compass Base" has been constructed on the Elmdon side of the airport and is now in use – this is an area where instruments on an aircraft can be calibrated

#### **Monarch Hangar**

Monarch Group is to build a new facility at Birmingham Airport. The new 110,000 sq foot hangar will initially create 150 jobs with the possibility of a further 150. The facility will be able to repair not just its own fleet, but other aircraft and is expected to be able to house large passenger jets such as the Boeing 787 Dreamliner, or up to 10 narrow-body aircraft. Work will commence in January 2013 and is expected to be operational by the end of the year. Monarch currently has hangars at London Gatwick, Luton and Manchester airports.

A new travel lounge, No 1 Traveller Lounge, opened in October 2012. It is the company's sixth UK opening but its first lounge outside London, creating 20 jobs in the local area. The lounge is located beyond security and will be the largest public lounge in the airport, The facility will be open to all departing passengers from Birmingham Airport.



Servisair have also opened the Aspire travel lounge which is open to all departing passengers regardless of airline or class of travel.

In 2012 Birmingham Airport set up a new travel trade team called 'The Airport Gurus'. The team will build relationships with travel agents, tour operators and other partners to give advice on all aspects of the facilities and services available at Birmingham Airport.

Construction of the new Watchman Radar has been completed and a testing programme is underway. The new radar is planned to become fully operational by February 2013.

Construction of the new Air Traffic Control Tower is now complete. It has been fitted out with the Air Traffic Control specialist avionics and state of the art radar and navigation technology installation carried out by NATS with support from a number of specialist suppliers. The tower will give unobstructed views across all parts of the Airport including both ends of the extended Runway. It is anticipated that the new Tower will be fully operational in April 2013. Giant Olympic rings were attached to the Tower to celebrate the 2012 games and to welcome visitors to the Airport.

The International Building and Link Block adjacent to the Elmdon Building at the Elmdon Terminal Site was demolished in 2012. As demolition only this did not require planning consent

The Solihull Draft Local Plan has been submitted to Government. A public examination of the document by the planning inspectorate was held in January 2013 and an initial assessment was made. The Council will now consider these interim conclusions, with a view to preparing a Schedule of Proposed Changes (including Main Modifications to ensure the soundness of the plan) to address any concerns. This Schedule will then be formally published,

Birmingham Airport has published its response to the Department for Transport (Dft) Draft Aviation Policy Framework. The report 'Wider Growth, Wider Connectivity' called on the Government to pursue a set of short-term aviation policies designed to make the best use of existing capacity at UK airports. Full details of the document are available on the internet at [www.balancedaviationdebate.com/research](http://www.balancedaviationdebate.com/research).

A review of the Airports public safety zones (PSZ) was undertaken in 2011/2012. The PSZ are areas of land at the end of the runway for which there are planning restrictions. This is to control the number of people at risk in the very unlikely event of an aircraft accident on take off or landing. The review is led by CAA and policy states that they should be updated every 7 years. A community outreach event was undertaken to inform local residents and the new PSZ are now implemented.

## 2. SURFACE TRANSPORT

Schedule 2 of the Section 106 Agreement relates to monitoring the mode of surface access used by all Airport users to reach the Airport. Part of the Agreement states:

“The Airport Company shall use **all reasonable endeavours** to achieve a Public Transport Modal Share for passengers and employees respectively of 25% by 31<sup>st</sup> December 2012, of 31% by 31<sup>st</sup> December 2022 or 20.9 million passengers per annum whichever event occurs later and of 37% by 31<sup>st</sup> December 2030 or 27.2 million passengers per annum whichever event occurs later”

Other obligations in Schedule 2 require the Airport Company to produce an Airport Travel Plan, establish an Air Transport Forum, a Travel Plan Monitoring Group and an Employee Travel Forum.

The Airport Company published an Airport Surface Access Strategy in 2007 which together with the new ‘Airport Master Plan ‘Towards 2030’,’ sets out a framework for the development of the surface access for the Airport to 2030.

The existing Airport Surface Access Strategy (ASAS) covers the period up to 2012 and introduces a new methodology for measuring modal shares and sets new modal share targets based on this methodology. These developments are discussed below.

In 2012, Birmingham Airport’s Travel Plan was launched. This includes a range of measures to influence passengers, employees and visitors accessing the Airport site. It focuses on all modes of travel and the primary objective is to ensure that the Airport is accessible for all uses. This will be reviewed every two years and will work to meet the modal share targets set out within the S106 agreement.

### Modal Share

All passenger modal share figures are taken from the Civil Aviation Authority survey which covers a period of 12 months. The survey for 2009 was taken over a period of 7 months.

The Section 106 sets separate Public Transport Modal Share targets for passengers and employees. The Public Transport Mode Share now includes all modes other than private car and taxi.

The Public Transport Mode Share for passengers now includes those people arriving at the Airport on buses from off-site car parks and those passengers arriving on courtesy buses from hotels.

The definition of the Public Transport Mode Share for employees is unchanged for years prior to 2012. 2012 figures onwards include car sharing as a sustainable mode and therefore will be included in the Public Transport Modal Share figures.

Table 2 and Table 3 show the Public Transport Modal Shares for 2005 – 2012, based on these definitions.

The ASAS also introduces a new target which relates to the ratio between total vehicle trips (inbound and outbound) and total passengers. The ASAS sets a 2012 target for this ratio of 1.08. Table 4 shows the value of this ratio for 2005 – 2011. Due to monitoring data availability, the 2012 ratio will be included within the 2013 report.

**Table 2 Passenger Mode Shares and 2012 Targets**

<b>Passenger Mode Shares %</b>	2005	2006	2007	2008	2009	2010	2011	2012	2012 Target
A. Car	58.5	57.1	58.3	56.2	55.4	54	53	50	55
B. Taxi	20.7	21.2	21.3	19.5	17.8	21	18	18	20
C. Off-site Car Park or Hotel Bus	9.1	7.5	7.0	8.6	7.7	7	6	5	9
D. Rail	9.1	11.7	10.7	13.2	15.1	15	19	23	12
E. Coach	0.8	1.0	1.1	0.9	0.8	1	2	2	2
F. Local Bus	0.7	0.6	1.0	0.8	1.1	2	2	2	1
G. Cycle									
H. Other	1.1	0.9	0.6	0.8	2.1	1	1		1
Public Transport (non-car/non-taxi, C-H)	20.8	21.7	20.4	24.3	26.8	26	30	32	25

**Table 3 Employee Mode Shares and 2012 Targets**

<b>Employee Modal Shares %</b>	2003-5	2004-6	2005-7	2006-8	2009*	2010	2011	2012	2012 Target
A. Car	77.4	74.0	72.6	72.7	73.0	76	71	67	73
B. Car Share								2	
C. Taxi	2.3	2.7	3.7	4.2	2.4	2	2	2	2
D. Off-site Car Park or Hotel Bus	0	0	0	0	0				0
E. Rail/Air-Rail Link	4.5	5.3	4.7	4.7	5.2	7	7	9	6
F. Coach									
G. Local Bus (& Coach)	13.4	15.0	15.2	14.9	17.0	11	17	17	16
H. Cycle	0.7	0.7	0.7	0.5	1.2	2	1	1	2
I. Other	1.7	2.2	3.1	3.0	1.2	2	2	2	1
Public Transport (non-car/non-taxi, B and D-H)	20.3	23.2	23.6	23.0	23.4	22	27	31	25

**Table 4 Vehicle/Passenger Ratio and Target**

<b>Vehicle Trips per Passenger</b>	2005	2006	2007	2008	2009	2010	2011	2012 Target
Total Vehicle Trips (millions)	10.81	10.74	10.60	10.80	9.61	9.39	8.8	
Total Passengers	9.39	9.15	9.18	9.63	9.10	8.57	8.6	
Vehicle Trips per Passenger	1.15	1.17	1.16	1.12	1.06	1.10	1.03	1.08

Note: Vehicle trips include all those on Airport Way and entering or leaving the Long Stay and Staff Car Parks

## Surveys

Information on modal shares is obtained through a series of surveys carried out at the Airport over the year. For passengers, the Airport Company previously conducted the surveys continuously in the departure lounges and landside areas of the Terminal buildings, but in 2010 the Civil Aviation Authority undertook the passenger surveys and will do so in future years. The reports can be viewed on the CAA website.

For employees, the Airport Company previously conducted interview surveys of employees at the Airport, but in 2010 the surveys were based on the annual Airport Employment Survey returns. In 2009, the Airport Company's Survey Programme was reduced, compared with previous years, as the Airport Company had to respond with fewer resources to the economic situation, the impact on air transport and a decline in traffic.

Employee data is now collected through the Annual Employment Survey and via individual organisations who are engaged with the Airport Travel Plan.

There is continuous monitoring of road traffic on Airport Way and the number of vehicles entering the public and staff car parks.

## Recent Trends

Passenger and employee modal share has shown a significant decline in car use and a subsequent rise in public transport. Rail use has increased to 23% in 2012, from 15% in 2010. Local bus patronage has stayed at 2% in 2010, 2011 and 2012, however it is hoped that the launch of the 97 bus overnight bus service in 2013 will increase local bus usage for passengers and employees.

## Rail

The Government announced the collapse of the West Coast Mainline franchise process following technical flaws in the bidding process. The bid process will be re-issued and in the meantime Virgin Trains will run the service until November 2014.

The Birmingham International Interchange sign has been replaced with Birmingham Airport Station, recognising that the Interchange is the Airport's bus and rail interchange station. This came after the Airport Company responded to West Midlands Regional Rail Plan which sought improvements.

Meetings have been held with National Express regarding improved connectivity from Birmingham Airport.

A refurbishment to Birmingham International Station has now been completed.

The Airport Company continues to work closely with Centro, Network Rail and the Train Operating Companies. Centro is preparing a new Regional Rail Strategy for the West Midlands where access to the Airport will be a key issue and discussions are taking place with Birmingham Airport regarding this.

### **High Speed Rail**

The Government has given the go ahead for phase 1 of the high speed rail link from London to Birmingham. Phase 1 will include a station at Birmingham City Centre and an interchange station to the East of the M42, the NEC and Birmingham Airport. Passengers will connect to the airport using a rapid transit people mover but the provision of this will not be the responsibility of Birmingham Airport.

The announcement was welcomed by the Airport Company and will help deliver an improved national transport network and provide additional capacity at the Airport along with local economic growth and regeneration. The link will reduce travelling times to the Airport from London to less than 40 minutes. Details of the HS2 proposals can be found at the DfT website ([www.dft.gov.uk](http://www.dft.gov.uk)) and currently the completion date is expected to be 2026.

Phase 2 has also been announced linking Leeds and Manchester to Phase 1. The current completion date is 2033.

### **Bus and Coach**

In May 2011 the Secretary of State for Transport formally opened the ANITA scheme. (Airport and NEC Integrated Transport Access) and the scheme is now completed. The ANITA scheme (Airport and NEC Integrated Transport Access Scheme) cost £11m and was funded by the Department for Transport. The aim of the scheme was to improve the road system around Birmingham Airport, the NEC and Birmingham International Station.

There is a new interchange at Birmingham International Interchange, improving the links between trains and buses; new bus shelters, traffic information signs along the scheme's route, which give information about the surrounding roads and bus services, ensuring drivers get the most up to date information about their journeys.

The traffic management signs will also help improve traffic flow in the area, especially around the times when there are large events at the NEC.

People will also be able to plan their journeys more easily, thanks to new passenger signs which give detailed information about the public transport services, for example, when the next bus is due to arrive.

And for those who prefer to walk or cycle, the scheme provides new and improved footpaths and cycle paths.

The scheme includes new bus infrastructure, improvements at the Multi Modal Interchange and facilities for cyclists. The proposed ANITA bus services will involve extended operating hours and frequencies to connect the Airport to Birmingham, Solihull and Coventry. These are subject to approval from the Traffic Commissioners.

The Airport Company and NEC continue to work with Solihull MBC, Centro and National Express on the ANITA bus services and meetings have been held with National Express regarding improved connectivity from Birmingham Airport.

### **Public Transport Information**

The Airport Company continues to review the range and quality of public transport information available at the Airport, and is considering how such information can be provided as real time information and through electronic media such as mobile phones.

As part of the ANITA scheme, Real Time Information displays were installed in the Multi Modal Interchange and in the Baggage Reclaim Areas. There will also be information regarding Motorways, Rail and Bus services.

A touch screen facility was installed on the first floor of the Multi Modal Interchange, which provides information on Airport onward travel information.

For passengers arriving at Birmingham Airport travel information will also be advertised on the luggage carousel information displays.

The Airport Company is working with Centro regarding surface access information and signage and how this can be improved.

### **Cycling**

The Airport Company continued to promote cycling as a convenient and healthy way for journeys to work for the 40% of staff living within five miles of the Airport. There are now 76 lockers available for staff use.

The Airport Company continues to work with SMBC to develop cycling facilities as part of the ANITA scheme. Work is also ongoing with Sustrans to develop safer and more pleasant routes to the Airport for cyclists

A letter of support was sent to Solihull MBC for its application for European Regional Development Funding (ERDF) to create a North Solihull Strategic Cycle Network with a view to improving connectivity between North Solihull and key employment sites in Solihull.

The Scheme, funded jointly through the European Regional Development Fund, managed by the Department for Communities and Local Government and Solihull Council, will create an additional 18km of cycle friendly routes. The routes will allow people to cycle to and from work more easily and will link into cycle improvements created through the recently completed Airport and NEC Integrated Transport Access Scheme, which was funded by the Department for Transport.

The £2.6 million scheme has five key construction elements and work on the first two phases began in June 2012. The remaining three phases will start in 2013 with an anticipated completion date to be March 2015.

As part of the project, grants will be made available for businesses located in the North of Solihull to assist in improving cycle facilities for staff with the aim to make cycling more accessible and attractive as a way getting to work. Full details of the Scheme and updates are available from Solihull Council web site.

Free short term cycle parking is available near the Terminal Departures but for long stays secure cycle storage available at Left Luggage.

**Other Developments**

Red Routes have been implemented on all landside roads at the Passenger Terminal Site to prevent traffic stopping anywhere apart from the designated areas and to manage traffic flow through the Passenger Terminal Site.

The red routes are to maintain safety for all users of the Airport. Drivers are not allowed to stop, unload passengers or park on red routes and the route has enforcement control with a fine of £100 for those who disobey the signage.

Birmingham City Council has also proposed a Red Route for the A45 corridor to include highway improvements and traffic management measures. Work started on this scheme in 2012.

The Airport Company has continued to operate a Through Salary scheme which offers a 25% discount on annual bus and rail tickets for Airport Company staff. In addition all staff employed at the Airport can avail of reduced bus, rail and metro tickets via the Centro and Travel West Midlands direct debit schemes.

**PUBLIC TRANSPORT PROJECT SPENDING**

The Airport Company continues to invest in transport connectivity and access to the site by sustainable modes. This includes £500,000 on the 97 route extension from April 2013. Additional investment will be made to schemes improving accessibility subject to an agreed business case.

**CAR PARKING**

Section 6 of the surface transport schedule states that *any increase in car parking provision should be provided at a rate less than the rate of increase in passenger or employee numbers.*

This is designed to encourage Airport users to leave their cars at home and use public transport when accessing the Airport site. Off-site parking is specifically excluded from the Section 106 Planning Agreement. Table 5 shows how passenger parking provision has changed relative to passenger numbers over the period.

**Table 5. Increase in parking provision compared to passenger numbers 1995-2009**

Year	Parking Spaces	% Increase since 1995	Passenger Numbers (m)	% Increase since 1995
1995	7010	-	5.33	-
1998	8195	17	6.70	26
2000	8195	17	7.60	43
2001	10603	51	7.80	46
2002	10626	52	8.00	50
2003	11060	53	9.10	70
2004	11855	69	8.80	65
2005	11855	69	9.40	76
2006	11480	64	9.15	72
2007	11586	65	9.23	73
2008	11124	59	9.63	81
2009	12816	83	9.11	71
2012	12697	81	8.9	69

### **3. HIGHWAYS AND AIRPORT DRAINAGE**

#### **AIRPORT DRAINAGE**

The Section 106 Planning Agreement states that the Airport Company should provide appropriate drainage measures with each new stage of airport development, Clause 5 of Schedule 3 being:

'The Airport Company shall implement in connection with the relevant phases of the development such drainage measures as may be reasonably required by the Council (in consultation with English Nature & The Environment Agency) to protect the River Blythe SSSI and other watercourses in the area of the airport site.'

A map of the airfield showing various aspects of drainage and pollution control measures is included at the back of this report (Map One).

All de-icing material used in the southern end of the runway is collected in holding tanks and discharged to the foul water sewer for treatment at the Severn Trent sewage works in Coleshill.

Any waters discharged to the watercourse must comply with the Consent to Discharge conditions imposed by the Environment Agency who independently sample to ensure compliance with these conditions. Three Total Organic Carbon monitors and two Biochemical Oxygen Demand monitors are installed, along with oil on water monitors. These test the water on a continuous basis, 24 hrs a day. The Airport is confidently complying with the Obligations as a result of this development using these facilities. In line with the other monitors analysing waters on the airport in the event of a problem the "fail safe" option will divert all waters to the polluted water holding tanks.

#### **ENVIRONMENT AGENCY**

The Airport Company has other obligations in addition to the Section 106 Planning Agreement, with reference to airport surface water drainage. The Environment Agency (EA) is responsible for the protection of controlled waters from pollution under the Water Resources Act 1991 and Environment Act 1995. The EA has granted BAL Consent to Discharge based on the following five water quality parameters, which must not be exceeded

- BOD 15mg/l
- COD 60 mg/l
- suspended solids 45 mg/l
- ammonia cal nitrogen 5 mg/l
- no visible oil

Should the Consent levels be breached, then the EA have significant enforcement powers which can result in polluters being fined, imprisoned, or both.

On 13 January 2012 Airport staff noticed a possible problem upstream on Low Brook. This was traced to a blocked foul water sewage overflowing to Low Brook. A tanker company was immediately bought in to clear the blockage and the EA was informed. It is not clear who was responsible for the blockage.



There was a further unrelated incident in January 2012. The EA were looking for the source of elevated suspended solids in Low Brook. A joint investigation with the EA and Birmingham Airport showed clay solids entering Low Brook via a stream culvert. This culvert takes not only Freeport drainage but Airport Drainage and other drainage. An inspection was carried out but corrected itself and the incident was closed. The source of the problem remains unknown.

The surface water discharging into the watercourse is monitored by spot checks by the EA. During 2012, EA Pollution Control Officers made four site visits to sample BAL's outfalls. All samples were sent for analysis, none of which breached the Consent levels

Whilst visiting the airport, the EA, in partnership with the Environment Protection Manager at BAL, observes airport operations and advises the tenants / operators of any concerns identified with regard to pollution and appropriate methods of prevention.

The Agency is in ongoing liaison with the Airport Company to improve and better protect the environment.

#### ENVIRONMENTAL INSTRUCTIONS

The Airport Company has a responsibility to ensure that airfield operations do not cause pollution to the watercourses that run through the airport. This includes all operations carried out by contractors, airlines, handling agents and other service providers.

An Airport Environment Instructions (AEI) has been issued by the Airport Company to all operating companies. The surface water quality section of this document makes clear to all airport operators their responsibilities and requirements.

The Airport Company checks for operators' compliance with the AEIs, the Consent to Discharge and Code of Practice by carrying out Environmental Audits throughout the airport site.

#### MONITORING

The Section 106 agreement does not require the Airport Company to monitor the quality of water throughout the Airport but this is undertaken voluntarily by BAL to try to ensure that the watercourses are not damaged by any airport activities. In addition to the continuous monitors on the airfield drainage system, monthly samples are taken from various locations on the watercourses and site drainage throughout the site. An independent hydrological consultancy produces a water quality report based upon these samples, through an independent laboratory.

All samples are sent to an independent laboratory for analysis and the results made available to the E.A. who also join in the sampling runs on occasions and take their own samples.

CONCLUSION

In conclusion, the Airport Company has been fully compliant with Clause 5 of Schedule Three of the Section 106 in providing drainage measures for new stages of development.

#### **4. NOISE CONTROL**

There are a number of Obligations which relate to noise as set out in Schedule 4 of the Section 106 Agreement as it was in 2012.

- a Sound Insulation Scheme that is to be paid for and organised by the Airport Company for the benefit of residents living close to the airport.
- the Airport Company should maintain the best equipment available for monitoring the noise from aircraft operations, and make all equipment and data available for scrutiny by the Council.
- control of engine ground running at the airport.
- all noise complaints to be responded to by the Airport Company and the numbers of complaints reported to Solihull MBC.
- a daytime noise limit will be set.

Each of these obligations is explained in more detail below.

The Airport's Noise Action Plan is a 5 year strategy setting out a series of actions and targets to assess, manage and where possible improve the noise climate around the Airport. The Noise Action Plan was approved by the Secretary of State for DEFRA on 19th May 2011 and work has commenced on progressing the noise actions. The plan can be viewed online at Birmingham Airport's website. The noise strategy revolves around three key themes; measure, mitigate and engage with the community.

During 2012 Birmingham Airport undertook a review of the Noise Action Plan. A progress report provided details of the actions and concluded that all are being successfully implemented.

The report also provided details of a review of day, evening and night (Lden) noise contours for the year 2011. The contours were created in accordance with The Environmental Noise (England) Regulations 2006. The contours showed that there has been a decrease in the area, population and number of households within all noise contour levels and at all time periods.

Full details are available in the Noise Action Plan but a summary of how the airport manages noise is as follows.

Initially aircraft flights are monitored with ANOMS to enable the Airport to understand any noise impacts and identify opportunities to reduce noise where possible.

The Airport operates various mitigation measures to ensure that aircraft operations both on the ground and in the air operate in the quietest manner possible. These measures include a Night Flying Policy, a daytime and night time noise violation levels, Continuous Descent approaches, single engine taxiing, and a restriction on Engine Ground Running.

The Airport operates a number of ways to keep local communities informed of what is taking place at the Airport which helps to understand any noise issues. This is undertaken through newsletters, an outreach facility to local communities, community impact alerts, and a new dedicated twitter feed. The Airport Consultative Committee is also represented by a wide range of Airport users and local groups. These include

local Councillors, Parish Councillors, Local Residents Associations as well as members from the Airport Company and Air Traffic Control.

### **Noise contours**

One way in which the Airport determines local noise impacts is through the use of noise contours which are a measure of noise represented on the ground as a line which is represented by differing noise level bandings. BAL reviews its noise contours every two years and produces new noise contours.

The most recent noise contours, created in 2012 as part of the review of the Noise Action Plan, have shown a decrease in the area, population and number of households within all noise contour levels and at all time periods. The  $L_{den}$  55dB and  $L_{night}$  50dB noise contour are designated for consideration in the Noise Action Plan. There was been a decrease in  $L_{den}$  55dB noise contour, with a decrease in area of 10%, 8% less population and 13% less households for this noise contour. Similarly, for the  $L_{night}$  50dB contour there has been a decrease of 3.3% in area, 2.4% population and 7.7% of households.

### **ANOMS**

The Airport Noise and Operations Monitoring System (ANOMS) is a noise and track keeping system and integrates secondary radar data with noise data captured at 6 permanent noise monitors in the local community.

### **Continuous Descent Approaches**

Although not part of the 1996 Section 106 requirements, the new Section 106 agreement requires the Airport to have a Continuous Descent Approach (CDA) Policy. In a CDA an aircraft descends towards the airport from its cruising height in continuous, approach with minimum thrust – rather than via the conventional series of stepped descents. As there are no "levelling-off" procedures, which require the thrust to maintain level flight, less fuel is consumed. It also leads to reduced noise. Implementation of CDAs has been brought forward prior to the new requirement and monitoring has shown that the airport is regularly achieving over 95% of arriving aircraft implementing CDAs.

### **Reduced Engine Taxi**

Birmingham has already included the provision for reduced engine taxiing in the UK Air Pilot entry for the Airport, making it the first UK airport to do so. This leads to a reduction in ground noise and reduces emissions and lowers the fuel consumption of the aircraft.

95% of fuel used by aircraft is when the aircraft is in the air, the remainder being used when taxiing to and from the runway. One way to reduce this is by single engine taxiing. This is where the plane taxis to or from the runway using only one of the engines to push the aircraft forward.

## Sound Insulation Scheme

BAL introduced a Sound Insulation grant scheme in 1978 for properties falling within the 1996 66 dB  $LA_{eq(16hr)}$  contour. The scheme provides sound proofing glazing to domestic properties in areas most affected by noise. The scheme has been open to over 7,600 properties; over 90% of those properties have already benefited with the installation of secondary glazing that significantly reduces the impact of aircraft noise in their homes.

In 2001, BAL consulted with local stakeholders and acoustic industry specialist's, to develop a new scheme. The new scheme continues to offer secondary glazing to those properties within the original scheme boundary that have not already taken up the offer of secondary glazing.

In addition, the Airport Company created a Phase II for properties closest to the Airport, based on the 2002 63 dB  $LA_{eq(16hr)}$  contour. Properties within this boundary for Phase II of the Sound Insulation Scheme are eligible for repeat grants. These grants are a one off opportunity for householders to improve the noise climate in their homes and can be used for High Specification Double Glazing or replacement secondary glazing and acoustic loft insulation. A maximum grant of £3,000 is available to fund these works and since the launch of Phase II over £1.4 million has been invested. Over the past 30 years the Airport has invested over £12 million to insulate more than 7,000 properties with high specification double glazing, secondary glazing, ventilator units and loft insulation.

BAL currently makes available, a budget of £200,000 in relation to the Sound Insulation Scheme. Householders in private and council owned properties are to be notified of their eligibility and invited to express interest in the scheme. Details of this new scheme are given below.

- Residents in the 2002 63 dB  $LA_{eq(16hr)}$  noise contour will be offered a review of the insulation provided under the old scheme. This continues to offer secondary glazing to those properties within the original scheme boundary that have not already taken up the offer of secondary glazing.
- The Airport Company will contribute a maximum of £3000 per property for high specification double-glazing and ventilator units

There were 54 properties insulated in 2012 under the Sound Insulation Scheme with a mixture of privately owned and council owned properties.

## Noise concerns

Table 6 shows the number of noise concerns received by the Airport Company's Environment Team since the Section 106 Planning Agreement came into force in 1996. The Airport Company is required under Clause 10 of Schedule 4 to keep a record of all noise-related complaints and provide written details to SMBC annually. The Airport Company goes beyond this obligation and records all complaints by type and number.

The Airport also has a portable noise monitor which can be left for extended periods at different locations. In 2012 the noise monitor was installed at Knowle and Hatton

**Table 6. Noise concerns since 1996 at Birmingham Airport**

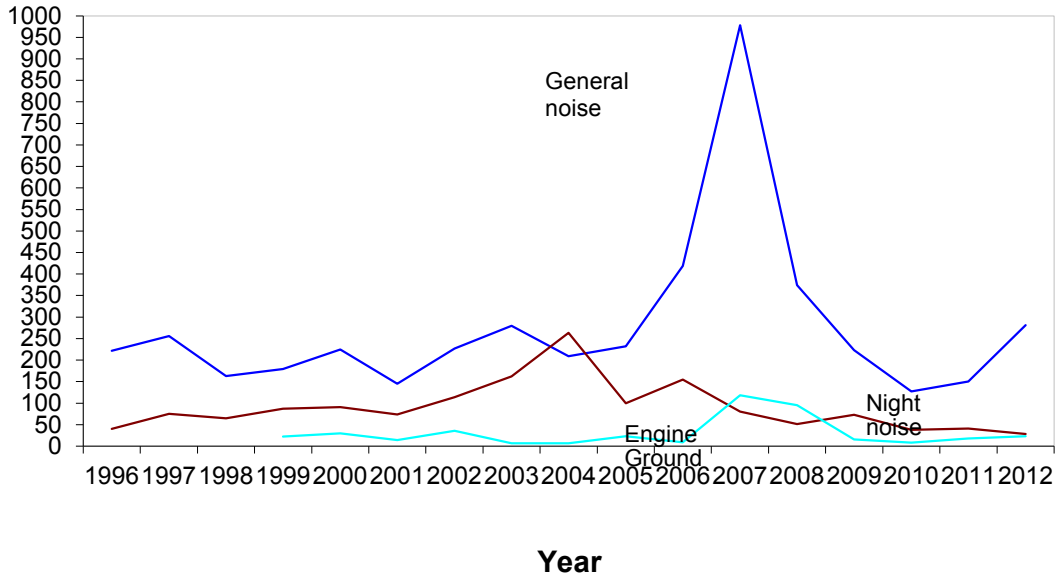
<b>Year</b>	<b>General Noise</b>	<b>Night</b>	<b>Ground Noise</b>
1996	222	40	Not recorded separately
1997	256	75	Not recorded separately
1998	163	65	Not recorded separately
1999	179	87	22
2000	225	91	30
2001	145	74	14
2002	227	114	36
2003	280	162	7
2004	209	263	7
2005	232	100	23
2006	419	157	9
2007	978	80	118
2008	374	51	95
2009	223	73	16
2010	127	38	8
2011	150	41	18
2012	284	28	23

There was a rise in general noise concerns compared to the last couple of years. This was due mainly to an increase in complaints from a few complainants, who recorded multiple complaints. The use of runway 15, which is mainly determined by weather, has also affected the number of complaints received as this may lead areas being overflowed which are not generally. Runway 33 is used for approximately 60% of the time.

There were also a number of complaints made regarding a noisier Antonov aircraft. This aircraft was chartered on behalf of a local automotive industry and the Airport discussed with the handling agent the concerned. An improvement was seen in the number of complaints when the operations of this aircraft lessened.

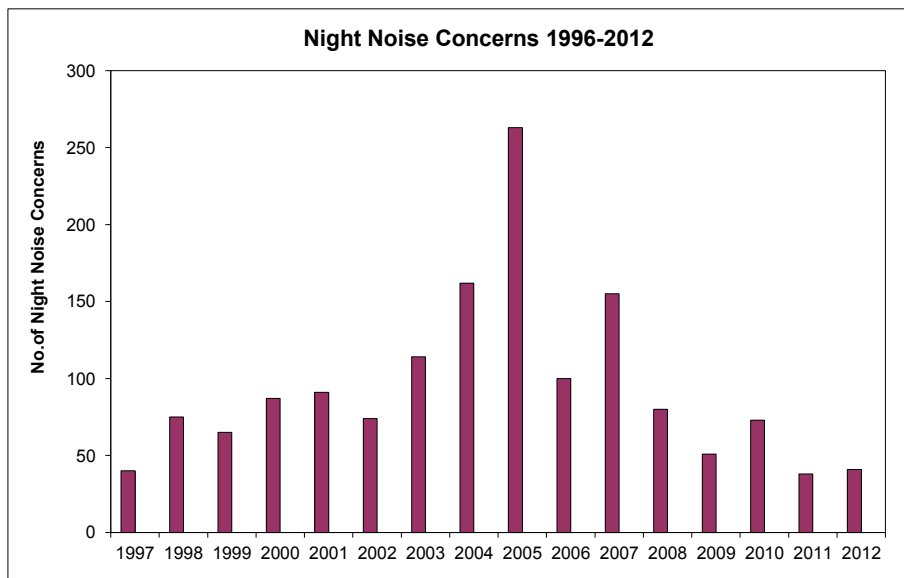
There was an increase in the number of complaints regarding Ground Runs with the majority being around March 2012. This may have been due to weather conditions whereby wind was blowing noise towards Elmdon and Sheldon.

**Figure 2. BAL noise concerns 1996-2012**



The Airport Company’s Government and Industry Affairs Team produces an Annual Complaint Report, which seeks, as far as possible, to identify trends.

**Figure 3. Night concerns 1996-2012**



The graph shows a decrease in night noise concerns in 2012 compared to 2011, and overall the graph shows a downward trend over recent years.

FULL POWER AIRCRAFT ENGINE GROUND RUNNING

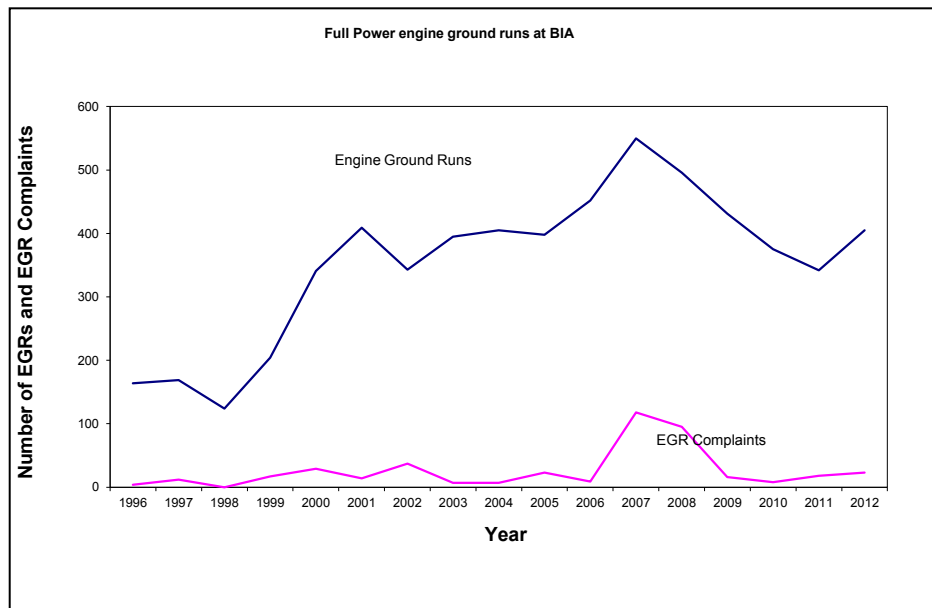
Engine ground running is an essential safety aspect of aircraft maintenance. However Birmingham Airport is aware that it has a noise impact on local communities and as such engine ground noise generates specific complaints. The number of full engine ground runs slightly increased this year, due to the type and frequency of maintenance required by airlines.

Clause 11 of Schedule 4 of the Section 106 Planning Agreement obliges the Airport Company to observe certain restrictions on ground running of engines and to follow set procedures designed to minimise noise disturbance. During the night-time there is a ban on full power engine ground running. In the morning shoulder period (0600-0700), BAL and the Solihull MBC have agreed a noise-limiting scheme, which is reviewed every two years.

Full power engine ground runs are only permitted after an application form has been sent to and approved by the Airfield Duty Manager (ADM) who then notifies the Environment Team. The number of full power engine ground runs that are approved are reported to SMBC and other interested parties in the quarterly environment monitoring report. Figure 4 shows the total number of full power engine ground runs that occurred between 1996 and 2012. Full power engine ground runs are only permitted at specific locations, Map Three, at the end of the report, shows these locations at BAL, with Taxiway Echo being the preferred location.

As part of the new Section 106 Agreement a feasibility study into the siting of an Engine Ground Running Facility will take place. Consultants will review all possible locations

Figure 4. Total number of Engine Ground Runs (full power) at BIAL 1996-2012





for a site and any mitigation measures required. The study will include existing and proposed new operations. Once the report has been completed it will be submitted to Solihull MBC.

#### IDLE POWER AIRCRAFT ENGINE GROUND RUNNING

In November 2009 SMBC Planning Committee approved Idle Engine Ground Running on all Aircraft Stands (with exception of the 80's stands) during the night period.

#### AIRCRAFT ENGINE GROUND RUNNING IN THE MORNING SHOULDER PERIOD

All full power and idle engine ground runs occurring in the morning shoulder period are monitored by the Environment Team. Since October 26 1999, the Airport Company has been operating under a Section 106 Planning Agreement (Schedule 4, Clause 11b) to consider restrictions on engine ground running between 0600 and 0700. At that time it was felt that the airport's restrictions on ground running were sufficient. Following a noise monitoring exercise a year later, Solihull MBC's noise consultant recommended the introduction of a quarterly noise level limit, set at 79dB LA<sub>eq</sub> calculated for a 1 hour period. Since this level was introduced it has not been exceeded.

There was a review of the engine ground running in the Morning Shoulder Period in 2009 and as specific complaints about this are rare it was decided that the current scheme should remain in place. This has been formally agreed by SMBC's Planning Committee.

#### NOISE RESTRICTIONS OUTSIDE THE NIGHT PERIOD

The Section 106 Agreement contains a clause which requires that the Airport Company should investigate the possibility of imposing daytime noise level restrictions on aircraft operations. Accordingly, in 2003, BAL implemented a daytime noise limit of 92 dB(A) for departing aircraft as measured at noise monitors 1 and 2. This is lower than the limit at London Airports and the same as that in place at Manchester.

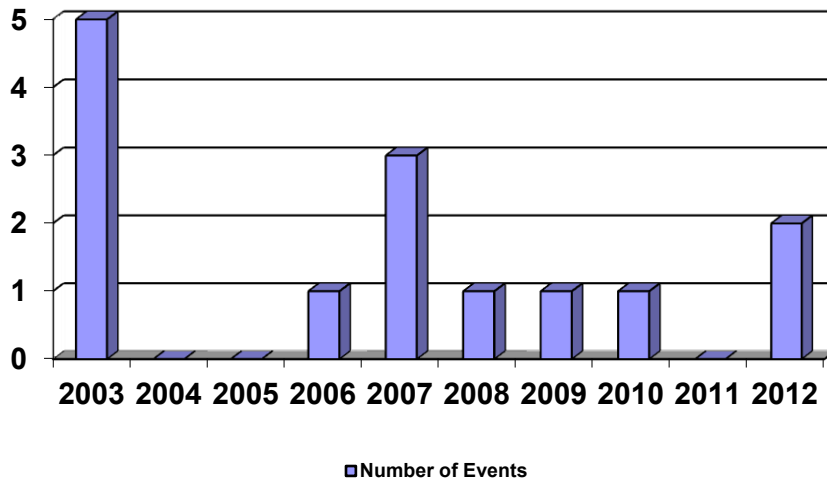
There are seven noise-monitoring terminals (NMTs) situated around the Airport, three to the North, three to the South and one on the airfield itself. Noise Monitoring Terminal 1 is at Bucklands End, Hodge Hill and 2 is at Eastcote Lane, Eastcote.

NMT's one and two are both situated at a point 6.5 km from the start of roll (where an aircraft applies full thrust for the first time as it starts its take-off). The NMTs are positioned at the point at which an aircraft is able to reduce thrust for the first time after take-off.

Currently, a departing aircraft which exceeds 92 dB(A) at either of the centre Noise Monitors between 0601 and 2329 is liable for a surcharge, such that the operators must pay £500 plus an additional £150 per decibel over the limit and the resulting fines are added to the community fund (see Schedule 8 for details of the fund and grants awarded in 2012).

There were two aircraft which exceeded 92 dB(A) in 2012. However one of these was within the tolerance allowed so only one Airline was fined.

Figure 5. Daytime noise events >92 dB(A) at BIAL 2003-2012



## 5. NIGHT FLYING

BAL is bound by the S106 to "*have and maintain a Night Flying Policy which restricts the use of the airport by aircraft taking off or landing during the Night Period and the Shoulder Periods*".

The Night Flying Schedule, which has driven the creation of the Night Flying Policy (NFP), is a complex multi-clause part of the contract between Solihull MBC and the Airport Company but the main points can be summarised as follows.

- The NFP shall be reviewed every two years.
- The NFP shall incorporate a quota system.
- All ATMs will be subject to a quota count (except exempt aircraft).
- The Airport Company will impose surcharges on aircraft breaching an agreed noise level during the night period and will report violations to Solihull MBC.

Birmingham Airport's existing Night Flying Policy is amongst the most stringent in the UK and was designed to minimise community disturbance through a range of measures. A summary of the Night Flying Policy restrictions is detailed below.

### CURRENT NIGHT FLYING POLICY

The Airport Company undertook a full review of the Night Flying Policy in 2011, including a public consultation. The review was presented to the Airport Working Party and a new Night Flying Policy was agreed in January 2012.

As part of this agreed new Policy it was agreed that the Airport would report to the Airport Working Party on progress after a year.

The previous Night Flying Policy included the following provisions:

- Night Annual Limit for ATMs set at 5% of total ATMs (2300 to 0600), split 76% Summer and 24% Winter;
- Annual Noise Quota Count Limit of 4,000 (2330 to 0600);
- Aircraft with a Quota Count value of 8 or more are prohibited to operate during the Night Period (2330 to 0600);
- The Night Noise Violation Level, where aircraft registering 87 dB(A), or more, are fined a full runway charge (2330 -0600);
- Taxiway Tango is not used between the hours 2300 and 0600 as a taxiway except in exceptional circumstances.

The provisions of the current Night Flying Policy are:

- Night Annual Limit for ATMs set at 5% of total ATMs (2330 to 0600), calculated based on the maximum Annual Limit for ATMs over the preceding 5 years
- Annual Noise Quota Count Limit of 4,000 (2330 to 0600);
- Aircraft with a Quota Count value of 4 or more are prohibited to operate during the Night Period (2330 to 0600);
- The Night Noise Violation Level, where departing aircraft registering 85 dB(A), or more, are fined a full runway charge (2330 -0600);
- Taxiway Tango is not used between the hours 2300 and 0600 as a taxiway except in exceptional circumstances.

**QUOTA USAGE FOR PREVIOUS NIGHT FLYING POLICY YEARS**

The Quota Count Limit is based on measurements of the perceived noisiness of aircraft which takes into account the type of noise (tonality) made by the aircraft in question, i.e. propeller noise, a low drone, high-pitched whistle or roaring sound or a combination of all of them.

Aircraft noisiness is measured in EPNdB (effective perceived noise in decibels). EPNdB values are clustered together into groups of 3 decibel increases for the purposes of producing a simple quota count. A rise of 3 EPNdB equates to a two-fold increase in noise energy. This is why the quota count doubles with increasing noisiness of the aircraft.

**Table 7. Relationship between EPNdB and aircraft quota count**

Noise Classification	Quota Count
<84 EPNdB	Exempt
84 – 86.9 EPNdB	0.25
87 – 89.9 EPNdB	0.5
90 – 92.9 EPNdB	1
93 – 95.9 EPNdB	2
96 – 98.9 EPNdB	4
99 – 101.9 EPNdB	8
Greater than 101.9 EPNdB	16

*Ref: NATS/CAA Supplements to the United Kingdom AIP SUP: 040/2012 [10]*

Table 8 gives a breakdown of the quota usage for the Night Flying Policy year (October – October). There is also provision in the Night Flying Policy that the quota can be reclaimed for aircraft registering less than 74dB(A) at the Noise Monitoring Terminals.

**Table 8. Quota utilisation at BIAL 1997-2012**

Year	Season	Night ATM Limit	Unused ATMs %	Night Quota Count	Unused Quota Count %
1997-98	Total	4200	27	5500	No data

1998-99	Total	<b>4200</b>	14	5500	64
1999-00	Summer	4180	31	4000	
	Winter	1320	50		
	Total	<b>5500</b>	<b>34</b>		53
2000-01	Summer	4484	36	4000	
	Winter	1416	62		
	Total	<b>5900</b>	<b>42</b>		54
2001-02	Summer	4727	41	4000	
	Winter	1493	61		
	Total	<b>6220</b>	<b>42</b>		54
2002-03	Summer	1427	38	4000	
	Winter	4519	22		
	Total	<b>5946</b>	<b>26</b>		45
2003-04	Summer	4574	28	4000	
	Winter	1444	20		
	Total	<b>6018</b>	<b>26</b>		46
2004-05	Summer	4435	23	4000	
	Winter	1401	62		
	Total	<b>5836</b>	<b>32</b>		51
2005-06	Summer	4102	20	4000	
	Winter	1295	20		
	Total	<b>5397</b>	20		54
2006-07	Summer	4319	22	4000	
	Winter	1364	34		
	Total	<b>5683</b>	<b>25</b>		50
2007-08	Summer	4128	14	4000	
	Winter	1303	27		
	Total	<b>5431</b>	<b>18</b>		57
2008-09	Summer	3969	24	4000	
	Winter	1253	31		
	Total	<b>5222</b>	<b>26</b>		50
2009-10	Summer	3884	<b>5</b>	4000	
	Winter	1227	<b>0.7</b>		57
	Total	<b>5111</b>	<b>4</b>		
2010-11	Summer	4319	<b>12</b>	4000	
	Winter	1364	<b>14</b>		
	Total	<b>5683</b>	<b>13</b>		61
2011-12				4000	
	Total	<b>5683</b>	<b>42</b>		63

#### NUMBER OF VIOLATIONS

Aircraft exceeding the 87dB(A) night noise limit will be subject to a surcharge, currently a full runway charge (up to £4000). The limit changed from 87 dB(A) to 85 dB(A) for departures only on 1<sup>st</sup> February 2012 in line with the new Night Flying Policy. During 2012 there were 7 violations of the Night Flying Policy. Three of these violations within tolerance limits allowed so were not charged. The details are shown in Table 9.

**Table 9. Details of the Night Flying Policy violations in the last Night Flying year**

Date/Time	Airline	Flight	Aircraft Type	Noise Level	Surcharge
1/1/12	Monarch	Arr	A321	87.4	No
4/1/12	Aero-Dynamic Ltd	Arr	BE9L	87.4	No
12/1/12	Meridian	Arr	AN12	87.7	Yes
19/1/12	Aerosvit	Arr	AN12	87	No
28/3/12	Ruby Star Airlines	Dep	AN12	88.6	Yes
25/5/12	Meridian	Dep	AN12	88.7	Yes
30/9/12*	Private Charter	Dep	GLF3	91.1	Yes

\*This flight also breached the Night Flying Policy as it had a Quota count of 4. This was reported to Solihull MBC. As this aircraft was a private charter it falls outside of normal conditions and due to this the processes are being made more robust to account for this eventuality in the future.

Since the Section 106 Planning Agreement was implemented in 1996, night noise infringements have decreased consistently. The number of night flights has remained relatively stable and the phasing out of noisier aircraft and the night flying policy surcharge have brought about a reduction in excessively noisy night flights.

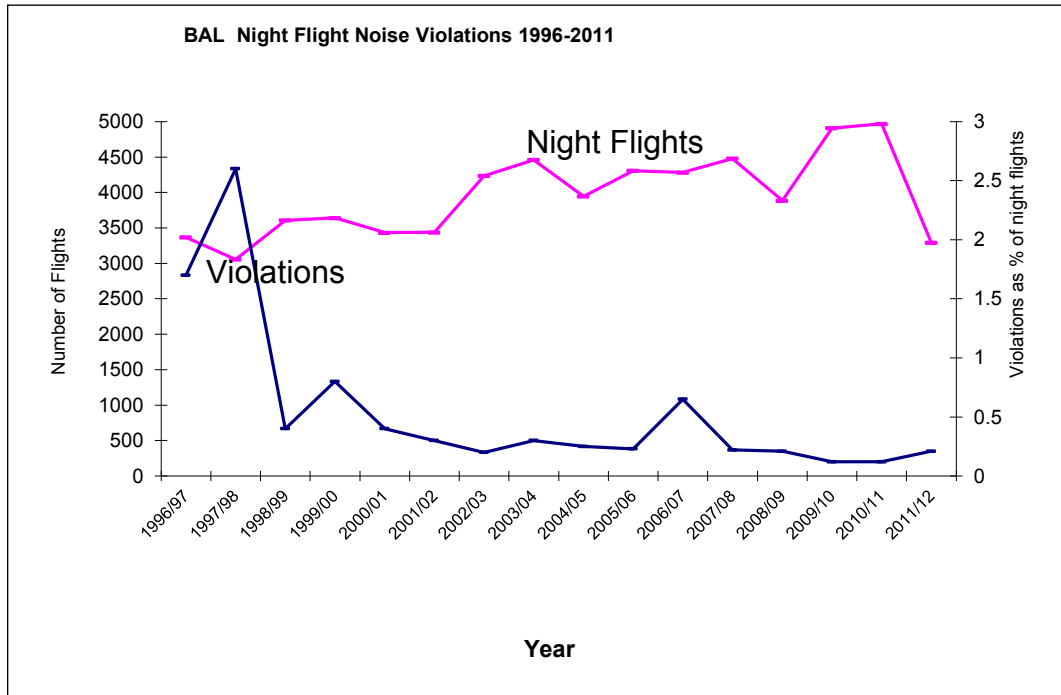
The table below details the night noise picture at BAL since 1996 with an additional year 1990/91 included for comparison.

**Table 10. Night-time noise violations at BAL 1990 and 1996-2012**

Year	Total Night Flights	Total Noise Quota	Total Infringements	Infringements (% of night flights)
1990/91	4767	n/a	n/a	n/a
1996/97	3369	n/a	57	1.7
1997/98	3056	n/a	79	2.6
1998/99	3608	2002.5	13	0.4
1999/00	3640	1936	29	0.8
2000/01	3434	1832.5	15	0.4
2001/02	3439	1854.5	9	0.3
2002/03	4234	2166	9	0.2
2003/04	4460	2161.5	15	0.3
2004/05	3947	1957	10	0.25
2005/06	4307	2172.5	10	0.23
2006/07	4283	2174.5	28	0.65
2007/08	4479	2281.5	10	0.22
2008/09	3886	2010	8	0.21
2009/10	4907	1704.5	6	0.12
2010/11	4968	1556	6	0.12
2011/12	3294	1480.3	7	0.21

The graph below shows the night noise infringements as a percentage of total night flights at BAL since the introduction of the night flying policy in 1996.

**Figure 6. Night Noise Violations compared to number of night flights at BAL 1996-2012**



## 6. AIR QUALITY

All of the Air Quality Strategy Objectives for the protection of human health were met at the site during 2012.

Schedule 6 Paragraphs 1 and 2 state that the Airport Company should maintain an air quality monitoring (AQM) station and maintain the diffusion tube monitoring facility.

### AIR QUALITY MONITORING DATA

AEA Technology collect, audit and verify BAL air quality data, then compile monthly and annual ratified reports.

The objective levels are those published by the Expert Panel on Air Quality Standards (EPAQS) which are designed to protect the health of persons sensitive to air pollution (see table below). These feed into the Government's National Air Quality Standards. (NAQS)

**Table 11. UK Expert Panel on Air Quality Standards Pollutant Levels**

Band	O <sub>3</sub>	NO <sub>2</sub>	SO <sub>2</sub>	CO	PM <sub>10</sub>
	8 hour running mean µgm <sup>-3</sup>	Hourly mean µgm <sup>-3</sup>	15 minute mean µgm <sup>-3</sup>	8 hour running mean mgm <sup>-3</sup>	24 hour running mean µgm <sup>-3</sup>
Low	0-32	0-95	0-88	0-3.8	0-16
	33-36	96-190	89-176	3.9-7.6	17-32
	67-99	191-286	177-265	7.7-11.5	33-49
Medium	100-126	287-381	266-354	11.6-13.4	50-57
	127-152	382-476	355-442	13.5-15.4	58-66
	153-179	477-572	443-531	15.5-17.3	67-74
High	180-239	573-635	532-708	17.4-19.2	75-82
	240-299	636- 700	709-886	19.3-21.2	83-91
	300-359	701-763	887-1063	21.3-23.1	92-99
Very High	360+	764+	1064+	23.2+	100+

**Table 12. Relationship between EPAQS pollutant levels and human health**

Band	Health Effect
Low	Effects unlikely to be felt even by individuals known to be sensitive to air pollutants.
Medium	Mild effects, unlikely to require action, may be noticed amongst sensitive individuals.
High	Significant effects experienced by sensitive individuals, action to avoid polluted areas may be needed.
Very High	The effects listed for high may worsen.

The NAQS levels provide for a certain number of exceedences per year. These are given in the table below.



**Table 13. Air quality results for 2012 at sites around Birmingham**

Pollutant	AQS Objective	Threshold	Result for Birmingham Airport	Birmingham Background	Birmingham Roadside	Coventry Memorial Park
PM10	24-hr mean not to be exceeded more than 35 times a year	50 µg m-3	5 days	3 days	11 days	-
	Annual mean	40 µg m-3	18 µg m-3	19	22	-
NO2	1-hr mean not to be exceeded more than 18 times a year	200 µg m-3	0 exceedance	0	0	0
	Annual mean	40 µg m-3	24 µg m-3	32	45	-
O3	Daily maximum of running 8-hour means not to be exceeded more than 10 times a year	100 µg m-3	8 days	8 days	2 days	7 days
SO2	15-min mean not to be exceeded more than 35 times a year	266 µg m-3	0 exceedance	0	-	-
	1-hr mean not to be exceeded more than 24 times a year	350 µg m-3	0 exceedance	0	-	-
	24-hr mean not to be exceeded more than 3 times a year	125 µg m-3	0 exceedance	0	-	-
	Maximum daily running 8 hour mean	10 mg m-3	0 exceedance	-	-	-
Benzene (England & Wales)	Calendar year mean	5 µg m-3	0.41 µg m-3	-	-	-

\* Ratified data for BIAL only – all other is unratified and cannot be used for direct comparison  
 (- = not monitored)

Ozone is a transboundary air quality issue. Therefore air quality levels recorded at the Airport Company's Air Quality Monitoring Station are not an indicator of levels generated locally. Ozone is rather a secondary pollutant, being formed through a complex series of chemical reactions at low level, involving nitrogen dioxide and hydrocarbon compounds, and in the presence of energy in the form of sunlight.

The Section 106 Planning Agreement (Schedule 6, Clause 8) requires measures be undertaken by the Airport Company if air quality falls below a required standard. The table above indicates that no pollutant was in breach of the air quality standards last year.

After many years of carrying out diffusion tube surveys it was decided after consultation with Solihull MBC to not carry out any more surveys as data so far has shown no problem with NO<sub>2</sub>. Solihull MBC have also stopped monitoring for this pollutant as many years of results show that sites are not exceeding recommended levels.

**Table 14. NO<sub>2</sub> survey results 1994-2010**

	NO <sub>2</sub> concentrations (ug/m <sup>3</sup> )								
	1994	1996	1998	2000	2002	2004	2006	2008	2010
BIAL Sites Mean	40	46	34	42	45	33	34	38	37
BCC Sites Mean	30	34	22	27	31	23	27	22	25
SMBC Sites Mean	30	32	24	25	27	24	28	25	25
Survey Mean	34	39	28	33	36	27	30	28	29

The latest survey showed very similar levels compared to previous years.

More information about nitrogen dioxide surveys at the airport can be obtained directly from the Government and Industry Affairs Team [9]

#### AIR QUALITY COMPLAINTS

Schedule 6, Clause 6 of the Section 106 Planning Agreement requires the Airport Company to record and report the number of concerns raised by the public relating to air quality, on an annual basis.

**Table 15. Concerns relating to air quality at BAL since 2000**

Year	Year												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	12	16	13	5	11	20	9	15	6	3	5	3	13

The data shows an increase in air quality complaints this year. This is attributed to the Antanov aircraft which were operating in early 2012. The aircraft was operating in full compliance with standards, however due to the older engines installed visible trails were created. The aircraft were providing just-in-time parts to Jaguar Land Rover and the movements have now declined.

Prior to 2000, air quality concerns were included in a general category, 'pollution'. Air quality does not constitute a major area of concern for complainants at BAL.

The Airport Company Environment Unit also investigates what are loosely termed 'oily deposits'. Samples are taken to Birmingham City Laboratories for independent analysis. Since 1996, 45 such investigations have been carried out, none of which has been found to be attributable to aircraft. There were none reported in 2012.

Laboratory results have indicated that the deposits ranged from natural algae growth in ponds, through pollen coating on windows to bird excreta containing the remains of consumed blackberries.

All complaints relating to oily deposits, odour and general health concerns are logged and included in the total air quality concerns. There have been no oily deposit investigations in 2012.

In March 2012 Sustainable Aviation launched its CO<sub>2</sub> Roadmap. This set out a plan for accommodating a growth in airtraffic over the next 50 years. while still maintaining

carbon emission at current levels. Sustainable Aviation is a unique alliance of the UK's airlines, airports, aerospace manufacturers and air navigation service providers. Birmingham Airport is a signatory of Sustainable Aviation and actively engages and supports the groups work. Together, we drive a long term strategy to deliver cleaner, quieter, smarter flying. SA is the first alliance of its type in the world, and reports regularly on progress in reducing aviation's environmental impact.

## 7. AIR TRAFFIC

Schedule 7 of the Section 106 Agreement stipulates that Noise Preferential Routes (NPRs) should be used by aircraft departing the airport, the usage of which should be monitored and reported quarterly to Solihull MBC.

### NOISE PREFERENTIAL ROUTES

Aircraft departing from Birmingham Airport are required to follow Noise Preferential Routes (NPRs). These are 3km wide corridors (1.5 km either side of the Standard Instrument Departure (SID)). There are five NPRs that are 3 km wide for aircraft departing from BAL: three to the north and two to the south. If an aircraft deviates from these NPRs at an altitude less than 3000 feet, then it is considered to be off track. Smaller aircraft less than 5700kg (such as executive jets) are exempt from adhering to NPRs. The NPRs relate only to departing aircraft. Arriving aircraft do not have a specified route to follow before the final approach, where they join the Instrument Landing System. The NPRs are designed to take departing aircraft over the least populated areas wherever practicable and can be flown by any aircraft operating from the Airport. **Please see below for details of the Airspace Change Proposal.**

The departing aircraft use standard instrument departure (SID) procedures when taking off. The direction of aircraft on departure and arrival depends on the wind direction. When the wind is from a northerly direction aircraft will take off over the north-west and arrive from the south-east

There are many cases where an aircraft can be off track for legitimate reasons, i.e. meteorological conditions or to maintain separation distance for safety reasons. All off-track aircraft are identified and the airline notified of their airlines performance.

In 2006 BAL launched 'Operation Pathfinder'. This is a scheme to encourage better track keeping performance amongst those airlines, which operate, from Birmingham. BIAL has set a voluntary target of 95% of aircraft 'on-track'. The ANOMS system allows the Airport Company to closely monitor the track keeping of departing aircraft and the Airport holds biannual meetings with the airlines to discuss any track keeping issues. During 2012 98.75 % of aircraft were "on-track."

The Operation Pathfinder group met in April 2012 and this was followed by the annual awards with Councillor Meeson presenting awards to airline companies. As well as a very high percentage of aircraft being on track there was a record 96% for Continuous Descent Approach compliance.

Currently, there is no provision to surcharge operators whose aircraft are off track. Surcharging at BAL relates solely to daytime and night-time noise levels. While the Civil Aviation Act 2006 does allow airports to surcharge airlines based on track keeping performance, the track keeping programme in place at Birmingham has seen continual improvements in performance without the need for fiscal penalties.

## **Airspace Change Proposal**

The Airport is consulting over a three month period on the redesign of its flight paths needed for the opening of the runway extension. There are 2 public consultations, one for a new arrivals procedure on Runway 33 and one for new departure procedures for Runway 15. A summary of both are below but full details of the proposals are available on Birmingham Airport website.

To ensure that everyone in the affected communities are aware of the process an Airspace Change Focus Groups (ACFG) was set up. This was comprised of individuals from communities which may be affected along with local Authorities and Environmental Groups. In addition to Roadshow travelled to each affected community to enable the local communities to get information on the new routes.

New routes are subject to legal requirements set out by the Civil Aviation Authority.(CAA). Any new routes are ultimately regulated by the Civil Aviation Authority and the consultation process is detailed in a CAA document-Guidance on the Application of the Airspace Change Process (CAP 725).

After the 13 week public consultation process the responses will be prepared and a formal proposal will be submitted to the CAA. Consultation information is available on Birmingham Airports web pages.

## **Departures from Runway 15**

An ACP is required because of the need to introduce new Standard Instrument Departure procedures (SIDs) to replace the existing procedures for Runway 15. New SIDs are required due to the departure end of runway (DER) moving 391 metres as a consequence of the runway extension. The CAA requires an ACP to be developed wherever there are changes to SIDs or Noise Preferential Routes (NPRs) within controlled airspace.

The DER is defined as the end of the area declared suitable for take-off (i.e. the end of the runway or, where a clearway is provided, the end of the clearway).

Aircraft on departure are required to follow SIDs which are a set of instructions designed to provide safe routes from the Airport to the UK airways system and are generally referred to as 'flight paths' .

Under International (ICAO) and UK (CAA) procedure design criteria, the SID starts at the DER. Thus, the runway extension (extended to the south-east) requires a change to the starting point of the SIDs.

The NPRs are currently 3km wide and the proposal sees this being reduced to 2Km which is due to the advance in technologies which mean that aircraft can fly a route much more precisely than before. The NPR's are flown until an aircraft reaches 3000 feet by which time the aircraft can leave the NPR.

The proposed new NPRs and SIDs will mean a change in the flight path when departing from Runway 15.

There are currently two proposals being consulted on, known as Option 5 and Option 6.

The new routes have been designed to be safe and flyable for all aircraft and to affect the least practicable number of households whilst meeting the CAAs requirements.

### **Arrivals to Runway 33**

In order to make use of the runway extension new approach procedures are needed for aircraft arriving on Runway 33 and these procedures are subject to the consultation process.

Aircraft use Instrument Approach Procedures (IAP) to land and the threshold location forms an important part of the IAP. As the threshold location will have to be moved because of the runway extension the IAPs will have to be redesigned and a new instrument approach is proposed to reflect the new threshold location.

This relocation of the threshold means a reduction in height of approximately 51 ft (15.5m) of the height above ground of aircraft on final approach when compared to existing situation.

It is hoped that the new IAPs will come into force in November 2013.

### **CONTINUOUS DESCENT APPROACH**

The Continuous Descent Approaches (CDA's) which were launched in 2009 are considered to be the best practice in the UK in terms of performance.

Aircraft are collectively achieving over 90% compliance with the CDA procedure and this will be built into the Operation Pathfinder Programme with the aim to further improve compliance and reduce noise impact.

CDA allows aircraft to descend on less power making a smooth approach without the need to level which traditionally has been the standard approach so helping emissions and also creates less noise. When the CDA were started they were conducted from 4000 ft to landing for every ILS approach. This has now changed to 6000 feet. It was expected that initially performance levels would decrease but reports have shown that performance is currently showing a 96% improvement in performance levels,

Continuous Climb Departures are now being considered. At present most departing aircraft from the Airport are given a continuous climb up to 6000 feet. This will change to 8000 feet. This will help lower aircraft fuel consumption and lower the CO<sub>2</sub> emissions as the highest levels of fuel burn and CO<sub>2</sub> emissions are generated by an aircraft climbing to 10,000 feet. Air Traffic controllers are encouraged to transfer aircraft to the next controlling agency early to help facilitate climbs past the 10,000 feet level.

NATS have re-introduced Eastern Vectors following requests from airlines. This will mean that aircraft will be vectored on the Eastern side of the Airfield when on arrival from the South to Runway 15. This will not only save the airlines a minimum of 5 track miles for each flight but a typical aircraft could save approximately 220kg of CO<sub>2</sub> per flight.

The Airport Company has prepared a report on how the Airport proposes to adapt to Climate Change with its operations and infrastructure. This report was submitted to DEFRA in May 2011 and is available on the DEFRA website. A positive response to the report has been received. The Airport Company has also signed up to the highest level at Sustainable Aviation's Aircraft on the Ground CO<sub>2</sub> Reduction Programme. The Airport Company is committed to reducing ground based emissions.

This is achieved through things such as aircraft taxiing with less than all engines operating- sometimes referred to as Single Engine Taxiing along with other initiatives such as Operation Pathfinder, switching off plane engines during taxiing, reducing holding on the taxiways, reducing flown taxi miles and saving CO<sub>2</sub> by using Continuous Descent Approaches

#### NUMBER OF ATMs

Although not required by the Section 106 Agreement, the annual number of Air Transport Movements (ATMs) is a useful indicator of the level of operation at BAL. The total air traffic movements include cargo, passenger and private/executive movements.

**Table 16. Total air traffic movements at BAL 1996-2012**

Year	Total Aircraft Movements
1996	96,266
1997	100,726
1998	108,852
1999	118,431
2000	126,633
2001	125,209
2002	125,083
2003	128,740
2004	120,799
2005	123,192
2006	119,532
2007	114,717
2008	112,470
2009	101,627
2010	96,668
2011	93,974
2012	91,841

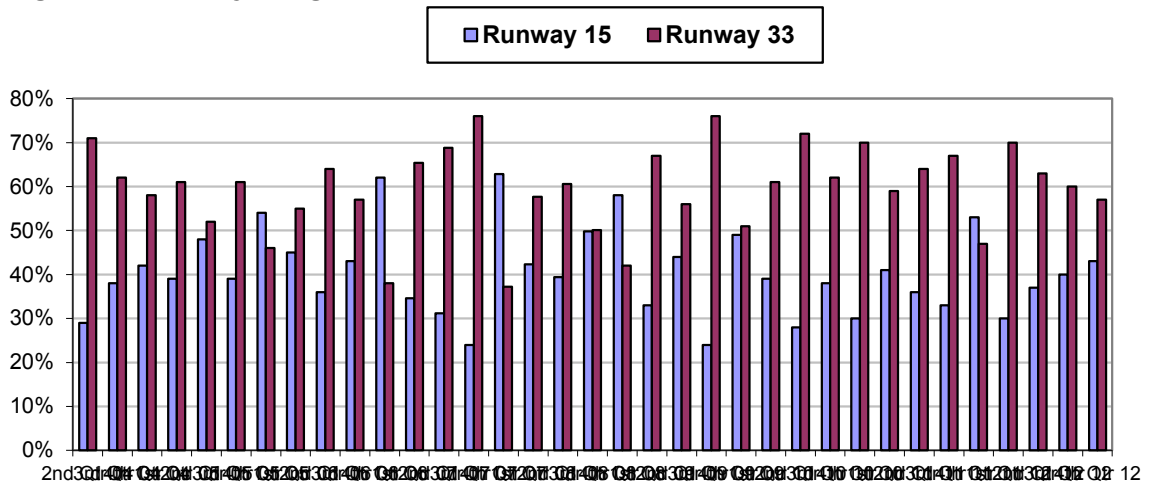
#### RUNWAY USAGE

The runways at BHX are named after the points of the compass to which they most closely approximate. This is standard throughout the aviation industry. Hence Runway 33 follows a 330° orientation (0° or 360° being north) and Runway 15, being the opposite end of the same length of tarmac, is at an orientation of 150°.

Although not a specific requirement of the Section 106 Agreement, the pattern of air traffic using the runway at BAL does have an impact on how local people are affected by airport operations. Wind direction and meteorological conditions determine runway usage.

The use of a NPR is mandatory until an altitude of 3000 feet is reached unless otherwise directed by Air Traffic Control who control the use of the runway.

**Figure 7. Runway usage at BAL**





## **8. COMMUNITY BENEFITS & ENVIRONMENTAL IMPROVEMENTS**

This Schedule of the Section 106 Agreement states that the Airport Company should set up and administer a Community Trust Fund (CTF). The Airport Company also provides sponsorship and education facilities to local areas.

The purpose of the CTF is to invest in a range of local projects, which benefit the community and environment. The CTF was established in 1998 and is a registered charity. The trustees comprise two representatives of Solihull MBC, two from Birmingham City Council, three from the Airport Consultative Committee and two from the Airport Company. All administration costs are met by BAL.

Each year the Airport makes £50,000 available to insulate schools close to aircraft flight paths against noise, through the replacement of windows. The Scheme is administered by Birmingham City Council.

Flight School, which opened in 2012 is proving to be popular with students. It is a dedicated unit for exclusive use by primary and secondary students and has been made possible through a partnership between Birmingham Airport, education and business partners.

It is a self contained unit and provides an insight to the airport and how it works. There is no charge to use the facilities but visits must be pre booked and are available to groups throughout the region. A range of education materials is supplied along with computers, whiteboards and web based resources. The facilities can cater for children from nursery age to post 16.

In 2012 the Airport Company provided sponsorship for the Catherine de Barnes fete. The Airport team also attended other events such as Elmdon Park Fun day, Sheldon Country Fair and Fun in the Park at Tudor Grange.

Community Outreach sessions are held throughout the year to offer local residents a chance to talk to Airport staff and talk about any concerns they may have.

Birmingham Airport also gave to a number of charities including its nominated charity, Acorns Children's Hospice, for which it has now raised over £35,000.

### **COMMUNITY TRUST FUND**

The Community Trust Fund is a registered charity run by Trustees. The income raised consists of an annual £50,000 investment from the Airport Company, and the revenue raised from the surcharges imposed for violations of the daytime noise limit and that given in the night flying policy. This money is then invested in projects that benefit those areas affected by the Airport.

Over the year of 2012 The Community Trust Fund awards amounted to a total spend of £55,165. This sum has been distributed among the projects listed in the table below. Any revenue in the CTF that has not been spent in previous years is carried over to the next financial year.

Since the inception of the Community Trust Fund in 1998 over £1.1 million has been awarded to projects benefiting the local community.

**Table 17. Annual Community Trust Fund awards 1998-2012**

Year	Total Awarded (£)
1998	98,156
1999	83,993
2000	153,139
2001	103,751
2002	97,670
2003	90,212
2004	72,868
2005	65,444
2006	51,175
2007	53,027
2008	67,349
2009	49,994
2010	52,40
2011	54,067
2012	55,165

The following table indicates the monies awarded for the year.

**Table 18. Community Trust Fund awards for the financial year 2012**

Lady Katherine Leveson School	Temple Balsall	£1,500.00	Log Cabin for outdoor Classroom
Ward End Bowling Club	W'wood Heath	£2,000.00	Bowling Green Renovations
Haven Court – Mercian Housing	Erdington	£ 662.00	Greenhouse & Gardening Equipment
Beaufort Bowls Club	Hodge Hill	£1,000.00	Lawn Mower for Green
Mohawks Ice Racing Club	Solihull	£1,500.00	Safety Barriers for Ice Racing
Fast Aid	Marston Green	£2,000.00	Defibrillators for Community Responders
Coppice Junior School	Solihull	£ 750.00	Gardening Equipment
Shard End Library	Shard End	£1,000.00	Soft Play Equipment
Knowle CoE Primary School	Knowle	£1,500.00	Raised Beds & Gardening Equipment
Robertson Knoll Social Club	Hodge Hill	£ 549.00	TV and Games Equipment
Old Silhillians Hockey Club	Copt Heath	£1,100.00	Hockey Ball Machine
Boldmere Bowling Club	Boldmere	£1,000.00	Green Maintenance Equipment
Pegasus Primary School	Castle Vale	£ 399.00	Gardening Tools & Equipment
231 <sup>st</sup> Rainbows & Guides	Hodge Hill	£ 800.00	Camping & Sports Equipment
St Cuthbert's Castle Vale	Castle Vale	£1,349.14	Folding Tables & Storage Units
Chivenor J&I School	Castle Vale	£1,290.66	Outdoor Shelter & Play Equipment
Berkswell & Balsall Common RFC	Balsall Common	£1,000.00	Tackle Machine and Coaching Equipment
W'wood Heath Cricket Academy	Hodge Hill	£1,000.00	Cricket Equipment
St Peter & St Paul's Home Assoc	Erdington	£1,295.00	Outdoor Musical Equipment
The Tuesday Club	Kingshurst	£2,000.00	Heating & Lighting Improvements
Saplings Before & After School	Elmdon	£1,500.00	Raised Beds/ Gardening Equipment
St Richard Church	Kitts Green	£2,322.00	New Boiler and Radiator
DIAL Solihull	Kingshurst	£1,176.00	IT Equipment
Catherine de Barnes CC	C'ine de Barnes	£ 749.00	Fencing
St Peter's Community Project	Tile Cross	£ 834.00	Driveway Repairs
Coleshill Social Bowls Club	Coleshill	£1,000.00	Lawn Mower
Balsall Common Village Hall	Balsall Common	£2,000.00	New Flooring
Marston Green Hort'ral Society	Marston Green	£1,108.56	Display Tables & IT Equipment
Wylde Green Primary School	Wylde Green	£ 400.00	Forest School Clothing & Equipment

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Heathlands Primary School	Castle Bromwich	£1,000.00	Raised Beds & Gardening Equipment
Gossey Lane School	Kitts Green	£2,000.00	Gardening Equipment
Castle Bromwich Singers	Castle Bromwich	£2,000.00	New Programme Folders
Friends of Sheldon Country Park	Sheldon	£ 950.00	Machinery Hire for Brook Clearance
Erdington Court Bowls Club	Erdington	£ 562.00	Camera & Printing Equipment
The Village Bus Project	H'pton in Arden	£1,474.00	Diesel Generator
1 <sup>st</sup> Marston Green Scout Band	Marston Green	£ 750.00	Musical Equipment
Radleys Allotment Association	Sheldon	£1,000.00	Security Fencing
Hampton FC	C de Barnes	£ 750.00	Training Equipment
Catney Village Hall Action Group	C de Barnes	£2,500.00	Roof Repairs
Kings Community Boxing Club	Sheldon	£2,395.00	Boxing Ring
St Swithin's House Trust	Barston	£2,000.00	New Shower Facilities
Yardley & District RFC	Stechford	£1,000.00	Toilet refurbishment
Water Orton Methodist Church	Water Orton	£2,000.00	Skylights and room repairs
	<b>Total for 2012</b>	<b>£55,165.36</b>	

## **CONCLUSION**

There has been some growth in the UK aviation market since 2011 but still below the peaks of previous years, The aviation market still proves to be tough and is a challenging time for all airports in the continuing economic climate and with environment issues.

However, August saw passenger numbers of just over one million passengers passing through the Airport which was the 4<sup>th</sup> busiest month in the Airport's History. This number was higher than any other UK Airport during the same period.

The Airport is continuously meeting with Airlines with a view to develop new routes and destinations and to attract new airlines and develop new services.

The runway extension has now started and is expected to be ready by early 2014. A three month consultation process on new flight paths was carried out with a series of road show's in communities affected by the changes. The Civil Aviation Authority (CAA) will make a decision whether or not to approve the new routes once the results of the consultation, together with the airport's proposals, have been considered.

Once the extended runway is open opportunities to fly direct to long haul destinations not currently served by Birmingham will be possible and talks are currently being held with Airlines to this end. The runway extension will also improve the local economy with jobs and potential export opportunities

In 2012 Birmingham Airport was awarded 'Airport of the Year' at the UK National Transport Awards, in recognition for excellence and its ongoing major improvement programme. The airport was in competition with Manchester, Stanstead, Glasgow, Aberdeen and Edinburgh. The awards were judged by members of the Department for Transport, Passenger Focus, Atkins Highways and Transportation and Transport Times. The Airport is also the only airport in the UK to offer free wireless internet.

2012 sees Birmingham International Airport continuing to comply with all Obligations within the Section 106 Planning Agreement.

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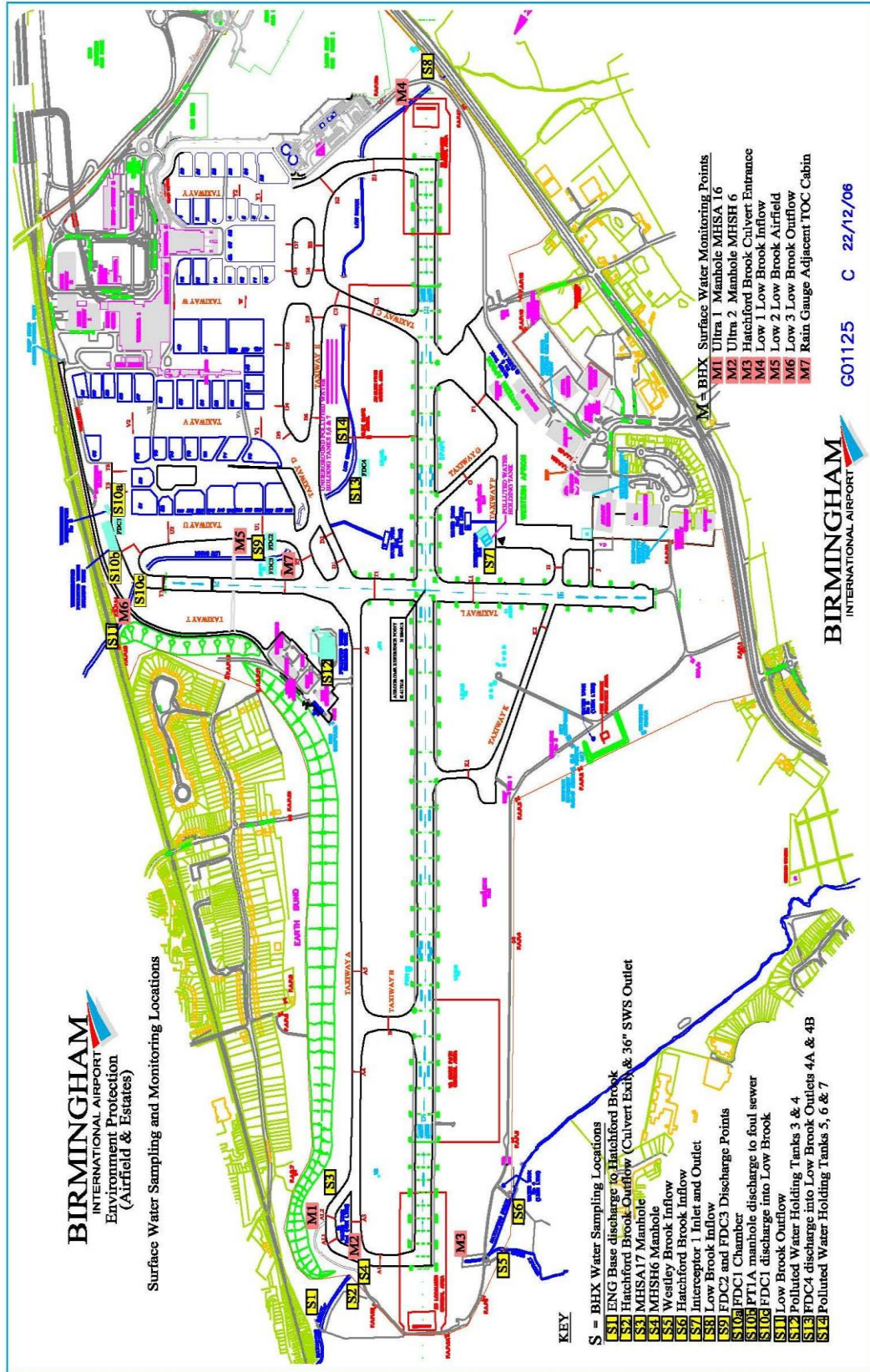
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Map 1