

# Bournemouth Airport

## Annual Monitoring Report

### 2010





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## **1. Introduction**

**1.1** This is the third annual report to be presented in accordance with the Section 106 Agreement signed between Christchurch Borough Council and Bournemouth International Airport following the granting of planning permissions for works to the passenger terminal and related development at Bournemouth Airport. It will set out the progress made by the Airport Company in meeting the obligations set out in the Agreements and measure progress against the previous years' reports. Through agreement with the Planning Authority we have moved the reporting date back so that we can accommodate full calendar year statistics.

**1.2** The planning permissions for the terminal redevelopment also came with a number of conditions and this report will also report on progress discharging those conditions.

**1.3** Many of the obligations and conditions reflect commitments already made by the Airport Company in its Master Plan to 2030 and in the planning submissions for the Terminal schemes.

### Progress on the Terminal Scheme

**1.4** The initial delivery of the programme concentrated on the provision of an extension to the main car park plus a considerable amount of enabling works to prepare the site for commencement of the main terminal project. Almost immediately however, the scheme faced a number of threats to its delivery, namely; an attempted Judicial Review by the New Forest National Park Authority, revised security considerations in light of the Glasgow Airport terrorist attack and the global economic downturn. Nevertheless, Manchester Airport Group confirmed its commitment to a total of £45m of investment.

**1.5** The initial works concentrated on the delivery of upgraded airfield infrastructure, an extension to the main car park and rationalisation and preparation works across the operational airport site. This latter element included the removal of certain worn-out buildings and the relocation of uses not required for airport operational purposes as well as a significant amount of ground preparation works for the terminal project itself.

**1.6** New lighting and navigational aids were installed on the runway and taxiways which allow aircraft to operate in adverse weather conditions to CAT3 levels. The runway was completely resurfaced during 2 months of overnight working. The apron next to the terminal building (east apron) has doubled in size with parking now available for six aircraft. Parking for a further five aircraft has also been provided on the west apron. Subsequently, a new Primary Surveillance Radar (PSR) and the Secondary Surveillance Radar (SSR) at Bournemouth Airport have been commissioned. The PSR is a system that identifies the range and bearing of aircraft and the SSR is used to detect the position of the aircraft and provides information on the aircraft's

altitude and identity. The project commenced in February 2010 and subject to full safety case approval is due to be fully operational in April 2011. The project budget is £3.125m. Cumulatively these works have put facilities at Bournemouth on a par with the U.K.'s major airports.

**1.7** The economic downturn continued to have a significant effect on passenger throughput, with consequent impacts on the timing of delivery of forecast growth. This initially led to a reassessment of the delivery of the terminal project but, as will be illustrated has also impacted on other areas of project delivery and the meeting of obligations. The terminal project was originally to be delivered as one project, but it was decided to concentrate initially on the delivery of the Departures building on the basis that the majority of a passenger's experience of the Airport is spent in the departure process. It was this element that required the most immediate attention in order to improve passenger experience and to attract new operators to the Airport.

**1.8** An interim departures facility was installed that ensured the safe and continuous operation of the airport, minimising disruption to passengers and airlines alike. Short-term measures to improve the arrivals experience were also introduced whilst it was decided how proceed with delivery of the arrivals scheme. The Departures building opened to passengers at the turn of 2010 with the official opening taking place in June. Feedback to the new facility has been overwhelmingly favourable.



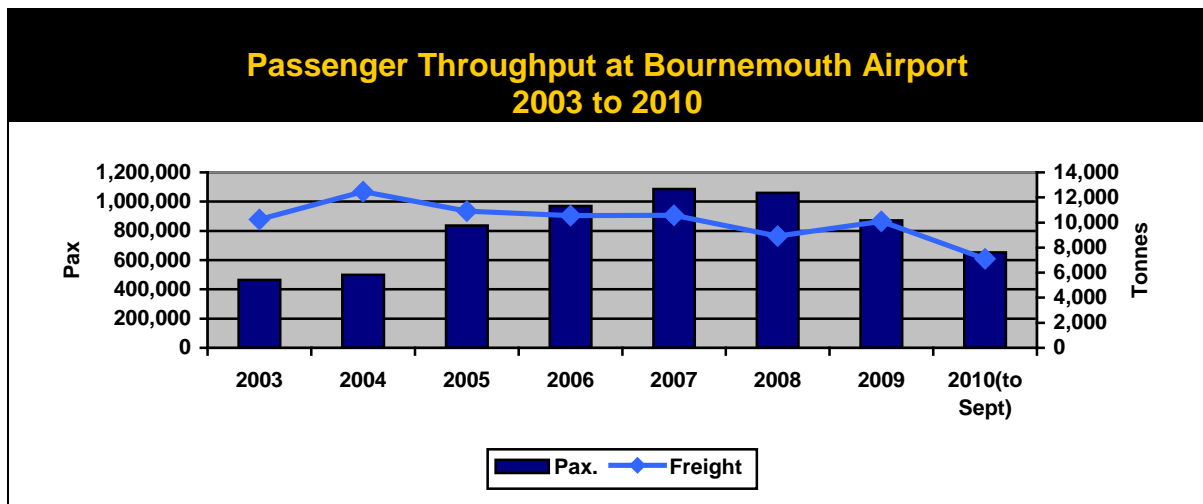
**1.9** Board approval to proceed with delivery of the arrivals element of the project was confirmed in the summer of 2009. The delay in bringing forward this aspect of the project has afforded the opportunity to reassess important elements of the delivery of the arrivals building, especially its environmental performance. MAG has a commitment to be carbon neutral in terms of its buildings energy requirements and fuel use and the delay in progress, for reasons previously cited, enabled a greater degree of scrutiny to be applied to the permitted scheme. It was decided to proceed with a significantly different scheme to the permitted Arrivals element.

**1.10** The consented scheme allowed for the retention of the existing arrivals facility to operate as domestic arrivals, with the new structure being reserved for international arrivals. For efficiency, it was decided to combine international and domestic arrivals in the same building.

**1.11** The new design sought to make maximum use of passive design measures in order to reduce the building's energy requirements (maximising the use of natural light and ventilation whilst reducing solar gain) as well as utilising new technologies such as photo-voltaic tiles on the roof structure. The changes were such that a new planning application was required. This was submitted to Christchurch and permission was granted in May 2010. This new permission came with a number of conditions over and above those required of the original consent and it was also required to make a Deed of Variation to the Section 106 Agreement to ensure that the clauses of the Agreement applied equally and without question, to both permissions.

Passenger numbers and services.

**1.12** The past few years have been extremely difficult trading years for the aviation industry as a whole. Bournemouth held out reasonably well in 2008 performing above industry levels but 2009 and 2010 have seen significant decreases in throughput. Forecasts suggest that it may be a number of years before the industry regains 2007 throughput levels.



**1.13** The table below shows the number of aircraft movements at the Airport over the last six and a half years. Those years that show an increase in passengers despite a reduction in the number of commercial movements can generally be put down to the use of larger capacity aircraft.

Year	Total Movements	Passenger Total.	Commercial Movements	Non Commercial Movements
2003	79,562	465,827	11,514	68,048
2004	81,692	494,820	10,827	70,865
2005	83,022	828,247	13,003	70,019
2006	78,973	958,158	12,756	66,217
2007	74,670	1,082,139	12,307	62,363
2008	81,733	1,058,845	11,977	69,796
2009	75,919	788,227	8,263	67,656
2010 (to Sept)	48,104	652,166	5,072	40,737

Commercial represents passenger aircraft, Non Commercial encompasses test flights, cargo flights, private and business aircraft, flying club and military aircraft.

**1.14** The following list shows destinations flown to from Bournemouth Airport during the course of 2010. Some are scheduled destinations and others are those served by charter aircraft.

Alicante, Spain	Antalya, Turkey
Barbados (Caribbean fly cruises)	Bodrum, Turkey
Corfu, Greece	Crete, Greece
Dalaman, Turkey	Dublin, Ireland
Dubrovnik, Croatia	Faro, Portugal
Fuerteventura, Canary Islands	Funchal, Madeira
Geneva, Switzerland	Girona, Spain
Gran Canaria, Canary Islands	Ibiza, Spain
Innsbruck, Austria	Jersey, Channel Islands
Lake Garda, Italy	Lanzarote, Canary Islands
Larnaca, Cyprus	Majorca, Spain
Malaga, Spain	Malta
Manchester	Minorca, Spain
Monastir, Tunisia	Murcia, Spain
Naples, Italy	New York, USA
Paphos, Cyprus	Pisa, Italy
Porto, Portugal	Rhodes, Greece
Sharm el Sheikh, Egypt	Tenerife, Canary Islands
Turin, Italy	Valencia, Spain

**1.15** The list of destinations served changes regularly, with different destinations being offered in summer and winter seasons and new routes becoming available. The Bournemouth Airport web-site is the most useful resource to keep track of the destinations available, [www.bournemouthairport.com](http://www.bournemouthairport.com).



## Measures taken to meet Obligations within the Section 106 Agreement.

**1.16** The Section 106 Agreement is a bilateral agreement between the Airport Company and Christchurch Borough Council, which commits the Airport Company to complying with the obligations set out in Schedules Two to Ten of the Agreement, Schedule One being a reiteration of the Planning Permission. What follows will set out each of the obligations contained in the Schedules and comment on progress made towards meeting those obligations.

**1.17** In securing permission for a revised Arrivals terminal building, a revision to the Section 106 Agreement was made. This did not affect the obligations set out in the following section, but ensured that it was correctly understood precisely which development the Agreement applied to through updating the list of drawings and permission notices to which it applies.

**1.18** The planning permission for the new terminal was also subject to a number of planning conditions that need be met. Section 11 of this report outlines the progress made towards discharging those conditions. The new Arrivals consent added a number of conditions to the original consent and these are detailed at the end of the section.

## 2. Second Schedule – Operational Restrictions

2.1 (Text in boxes is Section 106 Agreement text. Text highlighted in red is the from the definition section of the Agreement).

*1. Save where incompatible with safe flying operations the Airport Company will use reasonable endeavours to ensure the following requirements of this Schedule are complied with at all times.*

*Generally*

*2. Every operator of Aircraft operates its Aircraft in such a manner as to be likely to cause the least disturbance practicable to local residents and where applicable to follow such procedures promulgated by the Airport Company for noise abatement and minimising ground noise.*

### **Action taken**

2.2 Operational restrictions as they apply to Aerodromes in the U.K. are set out in the Aeronautical Information Publication (AIP), also referred to as UK Air Pilot. This also details the facilities and services available at aerodromes, who provides them and other information allowing for the safe operation of the airport. Within these instructions there are Local Traffic Regulations governing all aircraft arriving at and departing from the airport, which set out how aircraft move around the airfield, the protocol for liaising with Air Traffic Control and the use of the runways, Noise Abatement Procedures and Flight Procedures.

2.3 As well as the AIP the Airport has its own Airport Operational Instructions (AOI) that add further detailed operational requirements. The Airport convenes regular Pilots' Forums to discuss and reinforce the requirements of the AIP, to emphasise the Airport's desire to be a responsible neighbour to its communities, and to listen and respond to Pilot's concerns about operations. The responses from Community meetings inform these discussions too.

### **Noise Abatement Schedules and Clauses & Noise Action Plan**

2.4 It is important to note that during 2009, and following extensive consultation, the Airport prepared and submitted to Government a Noise Action Plan. This was a requirement of the EU Noise Directive (2002/49/EC) as transposed into the Environmental Noise (England) Regulations 2006. The preparation of this plan closely followed guidance issued by the Department for Environment, Food and Rural Affairs that was issued in March 2009. The plan examined the noise environment around the airport and assessed if this was at an acceptable level, as defined by the Regulations. This assessment deemed noise in the vicinity of the Airport to be at acceptable levels under the terms of the Regulations and no further action was required to specifically

conform with the Regulations. However, through the consultation exercise it became apparent that there were potential amendments to operational procedures and improvements to the reporting and analysis of complaints relating to noise that the Airport could make to address some detailed local concerns.

**2.5** Many of the types of measures the Regulations and guidance envisaged are precisely the types of measures that are outlined in the following schedules of this S106 Agreement. Reporting on compliance with the following schedules also cross-references findings from the Noise Action Planning Process and aspects of the consultation exercise that led to some revisions to procedures being proposed.

Landing Noise

3. Aircraft making an approach to land at the Airport shall follow a descent path which will not result in their being lower at any time than the descent path that would be followed by aircraft using the Instrument Landing System (*provided by the Airport Company at the Airport*).

4. Without prejudice to paragraph 1 of the Third Schedule the use of reverse thrust (above idle power) after landing is minimised, consistent with the safe operation of the Aircraft at all times.

5. To develop protocols to facilitate and encourage the use of Continuous Descent Approaches by aircraft making an approach to land at the Airport.

**Action Taken**

**2.6** The procedures for inbound aircraft to Bournemouth Airport are set out in the AIP. Amendments to this guidance have been proposed following the upgrading of the airfield systems. *“When using the ILS in IMC or VMC, all turbo-jet and turbo-prop aircraft shall not descend below 2,000ft QNH before intercepting the glidepath, nor thereafter fly below it. Aircraft approaching without assistance from the ILS or radar shall not at any time follow a descent path lower than that which would result from an approach using guidance from ILS.”* (ref UK AIP AD 2-EGHH-1-8).

Rules governing the Reverse thrust procedure are also set out in the AIP with the following instruction being included, *“Pilots are requested to avoid use of reverse thrust or reverse pitch above idle power settings on landing, consistent with the safe operation of the aircraft.”*

**2.7** The use of Continuous Descent Approaches is increasingly standard behaviour, but there have been some surrounding airspace issues that were required to be resolved before it could become accepted operating procedure at Bournemouth. A revised Letter of Agreement has now been reached with Southampton Air Traffic and Solent Control and the following protocol / wording is now proposed for the AIP:

*“a. Turbo-jet and turbo-prop aircraft are expected to apply continuous descent, low power, low drag approach techniques at all times.*

b. Subject to ATC instructions, inbound aircraft are to maintain as high an altitude as practical and adopt a new low power, low drag, continuous descent approach profile. ATC will provide estimated track distance to touchdown to allow pilots to descend at a rate they judge best suited to achieve continuous descent without using more power or drag than necessary. The object will be to join the glidepath at the appropriate height for the distance without level flight.

c. To facilitate these techniques aircraft should be flown no faster than 250 kts from the Speed Limiting Points and below FL100 and 250 kts – 210kts during the intermediate approach phase. Thereafter speed should be managed so as to achieve a continuous descent using as little power or drag as possible. ATC may provide regular range checks. Pilots who require additional track mileage to facilitate a successful CDA should inform ATC as soon as the requirement is apparent.”

Early indications are that the rates of compliance with this new procedure are very high, with Airlines demonstrating savings in fuel usage as well as the reduced noise impacts that the procedure offers.

Departing Noise

6. Departing Aircraft shall climb as steeply as is compatible with safety.

7. Unless otherwise instructed by Air Traffic Control, all departing aircraft save for Light Propeller Driven Aircraft (*propeller powered aircraft with maximum take-off weight not exceeding 5,700kg*) shall:

- (i) When using Runway 26, climb on runway heading to 0.6 nautical miles from the Airport as measured by Distance Measuring Equipment (DME) then track of 270° (M), climbing to a height of 2,000 feet before making turns.
- (ii) When using Runway 08, climb on runway heading to 1.0 nautical mile from the Airport as measured by DME then track 075° (M) to 4.1 nautical miles DME before commencing any turn to the south. Northbound departures may commence the turn after passing a height of 2,000 feet.

8. Departing Light Propeller Driven Aircraft shall climb straight ahead to at least a height of 1000 feet before commencing any turn. unless otherwise instructed by Air Traffic Control.

**Action Taken**

**2.8** The above operating procedures have been complied with. Changes were instigated in December 2009 in response to the Noise Action Plan consultation. This is try to ensure that Aircraft actually fly over areas that the above Schedule originally intended. The increased performance of certain aircraft operating out of the Airport has meant that altitudes specified in the Schedule have been reached sooner than was previously the case, with the consequence that turns have happened prior to where the above instruction intended. In amending the procedure it was found that some of the poorer performing aircraft, in trying to follow the new procedure, were ending up overshooting and therefore overflying the areas it was intended to avoid. The following further revised procedure will be included in the next AIP revision which will have a distribution date of 27<sup>th</sup> January 2011 and come into effect

on 10<sup>th</sup> March 2011. The situation will continue to be monitored to ensure that it is having the desired noise abatement effect:

*“The following Noise Preferential Routes shall apply to all turbo-jet aircraft and all other public transport Aircraft with a MTWA greater than 5700kgs, unless specifically otherwise instructed by ATC.*

Take off Runway 26:

*Climb on runway QDM to 0.6 DME then track 270 deg MAG. As soon as 3.1 DME and 2000ft altitude have been attained, execute turn on track as instructed by ATC.*

Take off Runway 08:

- a. *Required track between 001 and 079 deg MAG: Climb on runway QDM to 1.0 DME then track 075 deg MAG. As soon as 5.6 DME and 2000ft altitude have been attained, execute turn on track as instructed by ATC.*
- b. *Required track between 080 and 260 deg MAG: Climb on runway QDM to 4.1 DME, to be no lower than 2000 ft before turning.*
- c. *Required track between 260 and 360 deg MAG: Initiate the turn after passing 2 DME to be no lower than 1500ft unless otherwise instructed by ATC.”*

**2.9** The procedural changes to take off instructions are being developed through dialogue between the Airport, Air Traffic Control, the Pilot’s Forum and through dialogue with local communities. Hopefully these will have significant impacts upon the noise footprints of certain aircraft operating from the Airport.

Clearly this procedure is at variance from the wording in the Section 106 Agreement. However, the amendments that have been made are deemed to be in accordance with achieving the same ends, being the reduction in the levels of noise experienced by the local population. Through regular noise monitoring and assessment of complaints it is possible to keep abreast of the success of these procedures and adapt them where practicable.

Circuits

9. *The following minimum circuit heights shall be maintained subject to the provisions of the Third Schedule (Night Operations):*

- (i) *1,000 feet for circuits between 06:00 – 20:00 hours by all aircraft less than 5,700kg maximum take off weight;*
  - (ii) *1,500 feet for circuits between 06:00 – 20:00 hours by all aircraft more than 5,700kg maximum take off weight and all Jet Aircraft;*
- 1,500 feet for circuits between 20:00 and 23:30 hours by all aircraft.*

## **Action taken**

**2.10** The above procedure is written into the Bournemouth AIP and is standard operating procedure at the Airport. This schedule is therefore being complied with.

### **Ground Running**

10. Ground running (*means the running of aircraft engines at high power settings for the purpose of testing and maintenance, or where there is no intention to taxi or fly*) is only permitted subject to the following restrictions;

- except in an Emergency, such running of engines shall only take place within the areas shown hatched blue on the Plan C attached or such other areas as may be agreed in writing by the Council.
- Ground Running shall not take place at the following times:-
  - (i) Before 08:00 hours or after 20:30 hours Monday-Friday, other than start up or shut down procedures and in the case of an Emergency,
  - (ii) Before 09:00 hours or after 17:00 hours on Saturday and public holidays, other than start up or shut down procedures or in an Emergency,
  - (iii) Anytime on a Sunday, or
  - (iv) On Armistice Day between 10:55 and 11:05 hours or during any other period of remembrance specified by HM Government,

*provided always that Ground Running may take place at the times mentioned in subparagraphs (i), (ii) and (iii) above with the Airport Company's prior consent where Ground Running is essential for safety reasons or the avoidance of unforeseen and serious congestion at the Airport, or serious hardship or suffering to passengers or animals whereupon the Airport Company shall forthwith notify the Council of the Reasons for such consent being granted.*

## **Action taken**

**2.11** The latest AOI regarding ground running (AOI 29 / 09) was adopted in January 2009 and amended in October 2010 and fully reflects the ground running restrictions set out in the Section 106. It sets out the procedures for applying for approval for ground running and explains all the relevant safety and aircraft positioning information. The AOI also contains the application form required to apply for approval.

**2.12** There have been no 'exceptional' runs recorded in the review period. Logged details of all engine runs are available for inspection by the Local Authority if required.

**2.13** In the summer the Airport successfully bid for and secured SWRDA funding towards improvements to the engine test area on the disused north – south runway. This involves strengthening works to accommodate

### Monitoring

11. *The Airport Company shall maintain sufficient records of the number and types of aircraft taking off from and landing at the Airport. Such records shall be available for inspection by the Council at all reasonable hours, upon 3 working days prior written request.*

12. *Within 6 months of the Commencement of the Development the Airport Company shall submit to the Council for its approval details of an Internet-based system which shows details of the height and track of public transport aircraft using the Airport and within 6 months of approval being given to provide and thereafter maintain the approved system so that it is publicly accessible.*

13. *Within 6 months of the Commencement of the Development the Airport Company shall establish and thereafter publicise and maintain a noise complaints service which will investigate the cause of all formal noise complaints made to the Airport Company by the public. The Airport Company shall provide a written response to each formal complaint as part of the noise complaint service indicating the outcome of the investigation and any action proposed to be taken to review or modify procedures as a result of the complaint.*

14. *The Airport Company shall not report not less than annually to the Council and to the Airport Consultative Committee the number and nature of noise complaints together with the action taken by the Airport.*

### Action taken

**2.14** The records of all aircraft using the Airport are available for the Council to inspect at any time, upon 3 working days prior written request. Such a request has not been received within the period between the signing of the agreement and the drafting of this third report.

**2.15** Bournemouth Airport became the first regional airport in the south to allow the public to view the movement of flights and air traffic patterns with the introduction of the web-trak system, which can be viewed on its web-site. The system provides detailed information about aircraft that have landed or taken off from the Airport and replays the track the aircraft has flown. Flight information is updated daily and is displayed 24 hours in arrears to maintain aviation security. The data is sourced from the Bournemouth radar and includes all aircraft operations within a 30 mile radius of the Airport, with the exception of aircraft above 15,000ft. The public can interrogate the system to obtain information such as the aircraft's track, altitude, airline and aircraft type. Other aircraft operating within the Airport's airspace that did not arrive or depart from the Airport will also be displayed but without the detailed information provided for Airport-related aircraft. Christchurch Borough Council approved the system in writing following demonstrations of the system to Council Members and Officers. We are consistently in dialogue with the system providers to explore ways of improving the web-trak facility. Certain limitations of the system have been brought to our attention and amendments have been made to try to rectify these. Track information has been increased and data is stored for a longer period of time.

**2.16** A noise complaints service now operates at the Airport whereby members of the public can register complaints and are assured of a written response within 5 days. This has been reduced from 10 days as a result of feedback to the Noise Action Plan consultation. A complaints log is maintained and is available for the local authority to inspect and the below represents an example of how information is recorded.

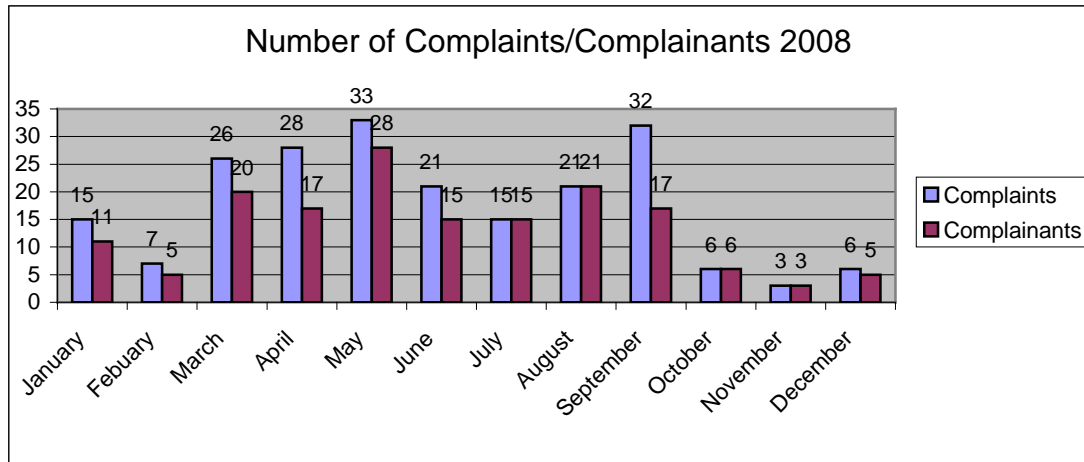
Complaint Number	Date incident reported	Incident time	Area	Nature of Complaint	Callsign	Airline	Aircraft type	Height	Date responded
107/08	16/06/08	0:50	Burley	Night Flying	RYR7545	Ryanair	B737-800	5,300ft	30/06/08
109/08	17/06/08	15:27	Barton on sea	Schedule	RYR9082	Ryanair	B737-800	2,100ft	25/06/08
114/08	27/06/08	19:21	Ferndown	Helicopter	32	Police			03/07/08
116/08	02/07/08	2:00	Ripley	Night Flying	AWC13R	Titan	B737-300		09/07/08
117/08	13/07/08	3:00	Forest	Night Flying	TOM306E	Thomsonfly	B373-300	2,500ft	14/07/08
118/08	14/07/08	13:20	Southampton	Light	GLYNS	Private			16/07/08
120/08	16.07/08	4:45	Burton	Night Flying	Mail Flights	Atlantic	ATP		30/07/08

**2.17** Analysis of noise complaints are compiled into monthly reports are available to the Local Authority for scrutiny. The establishment of a regular Environmental Health Officer Liaison Group provides an ideal forum for their reporting and dissemination. They are also compiled into reports to the Airport's Consultative Committee. The charts below represents just some of the information that is monitored and reported compared across the three years of reporting of the information in this format.

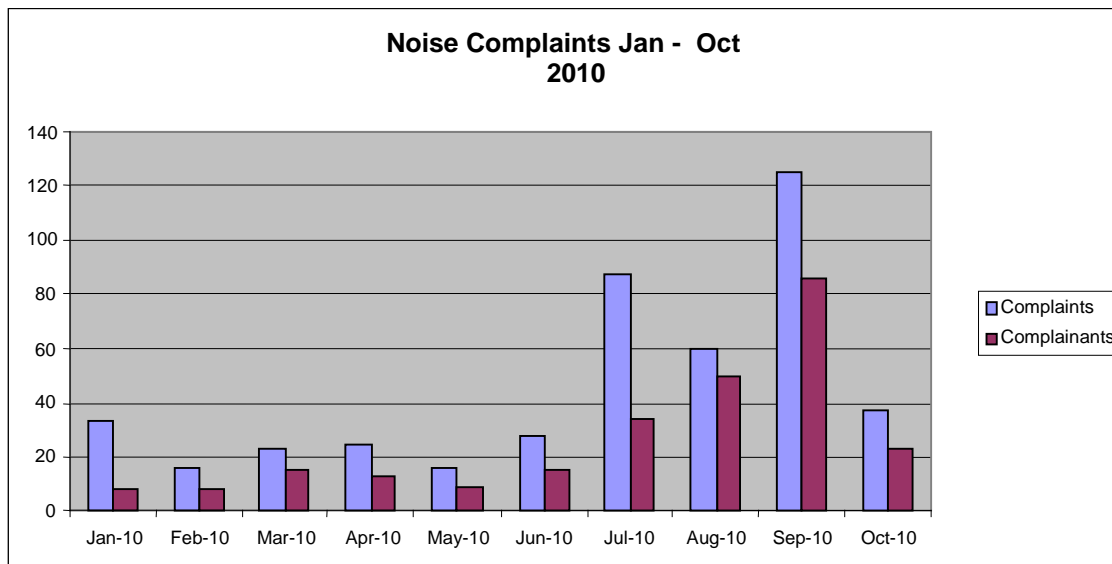
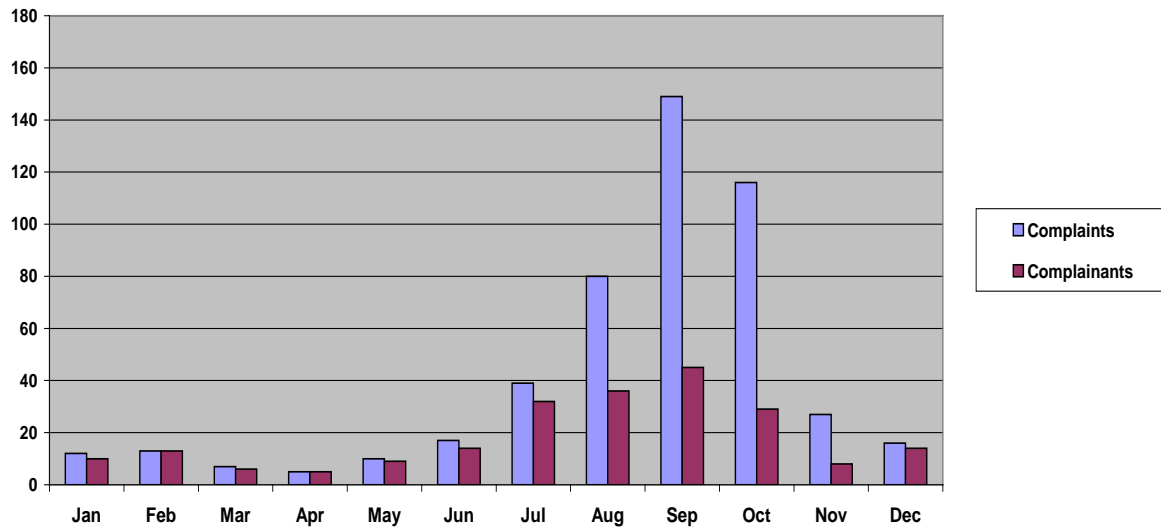




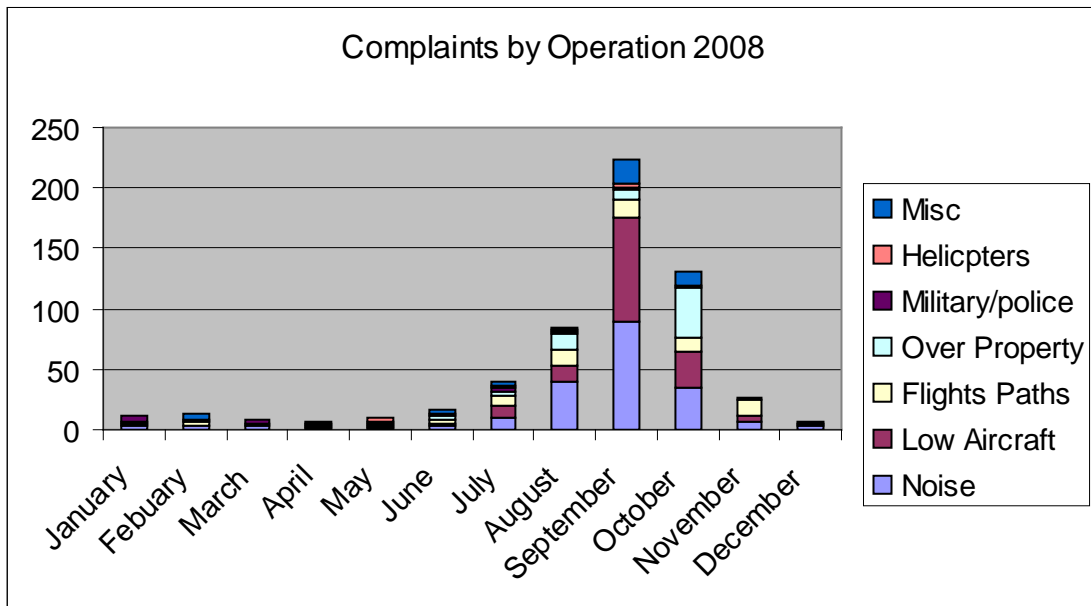
## Complaints / Complainants



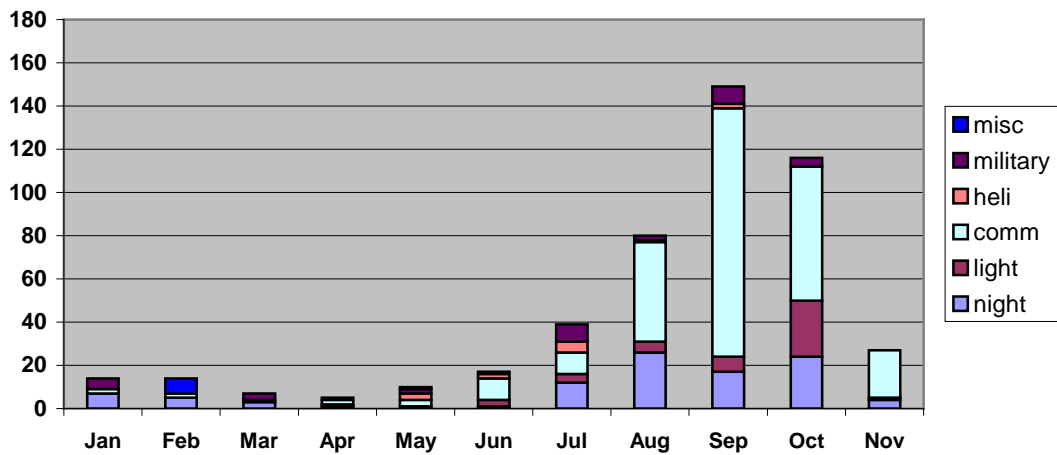
Number of complaints / complainants (2009)



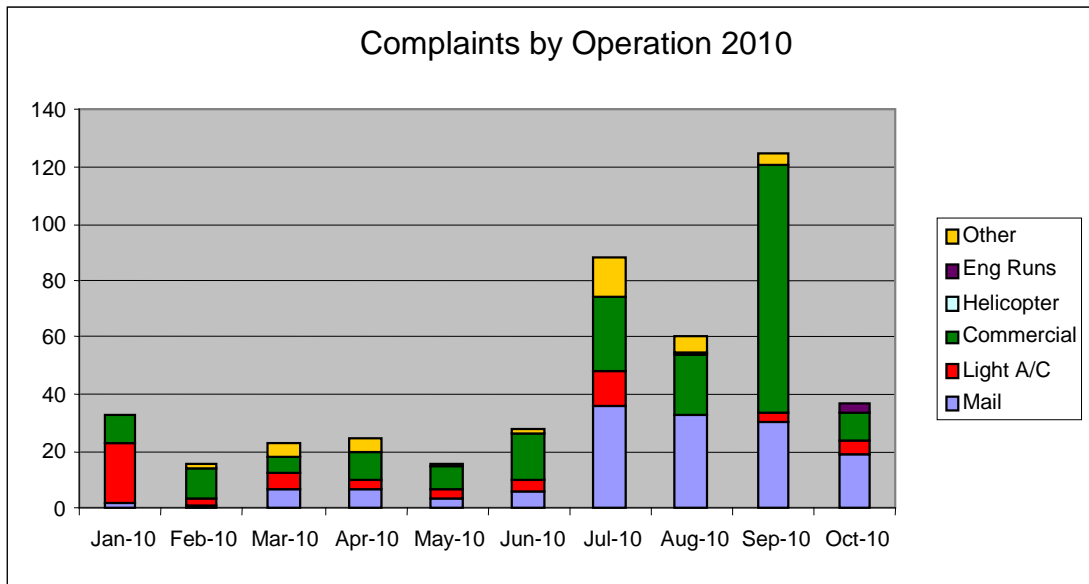
### Complaints by Operation



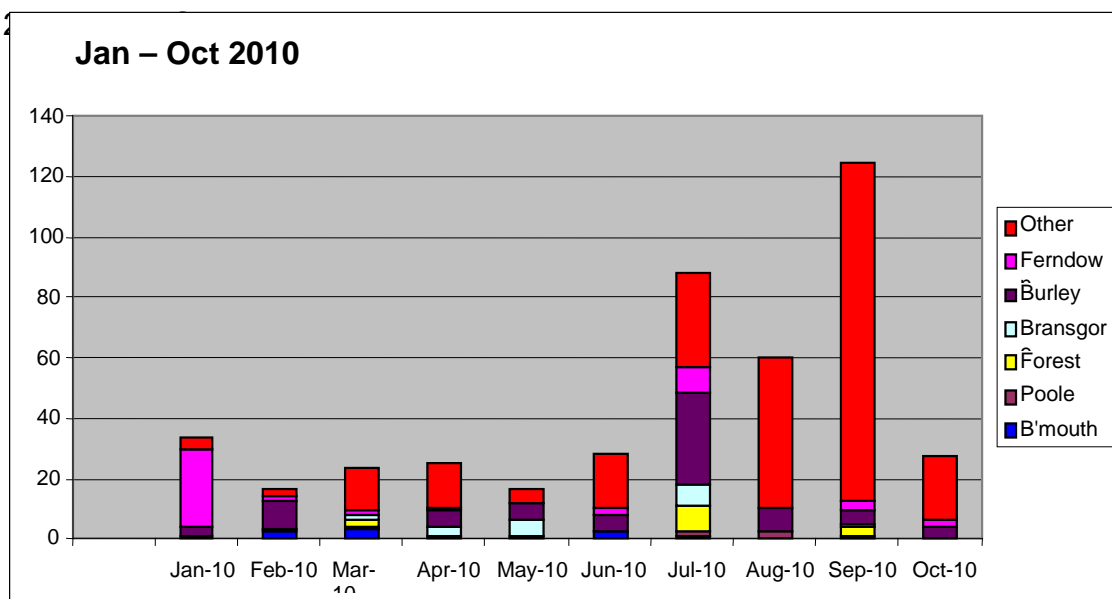
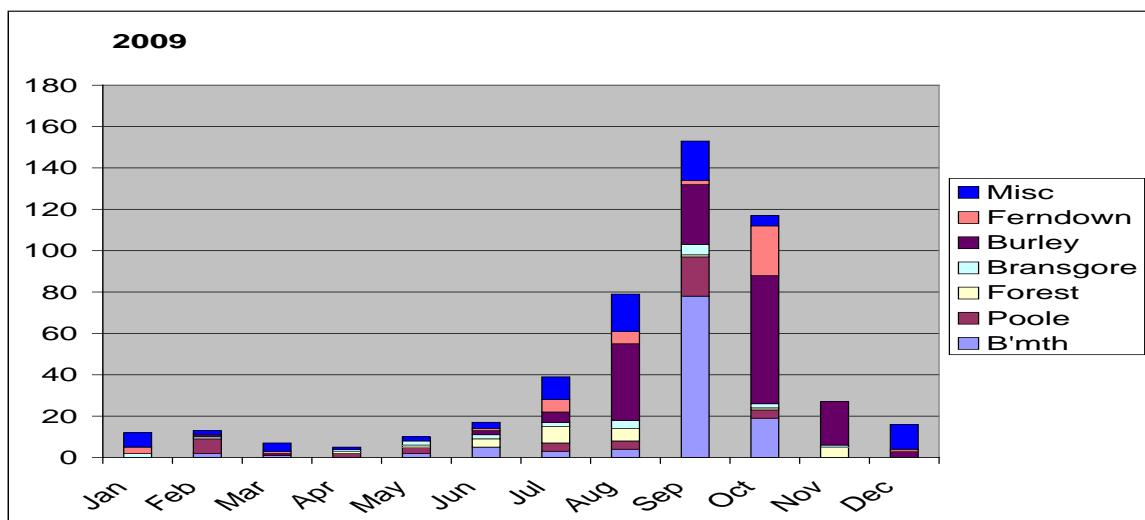
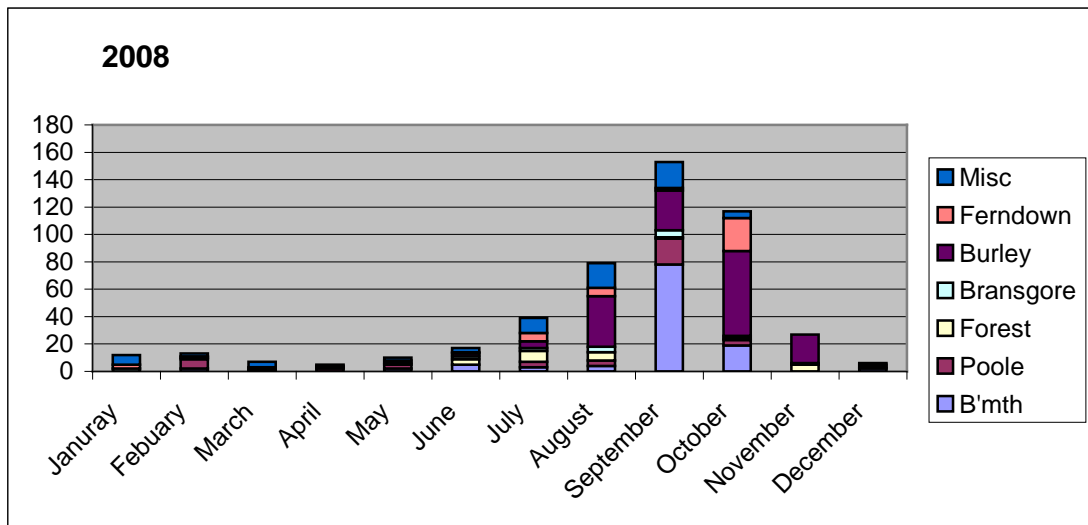
### Complaints by Operation 2009



### Complaints by Operation 2010

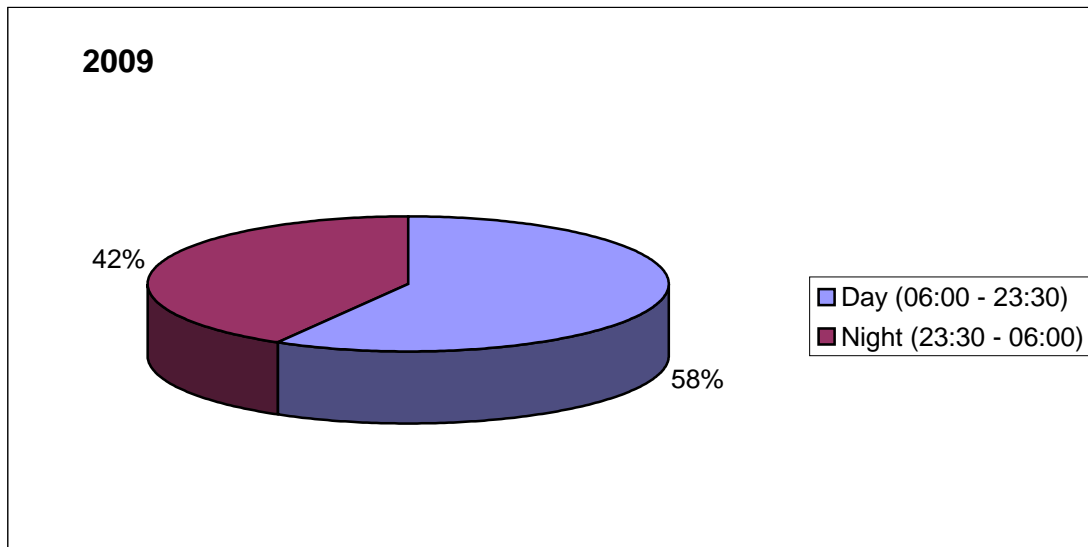
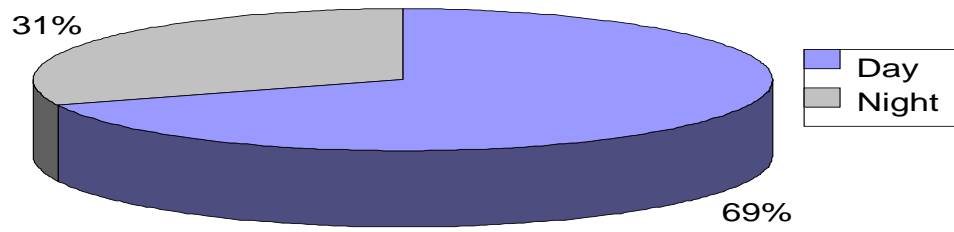


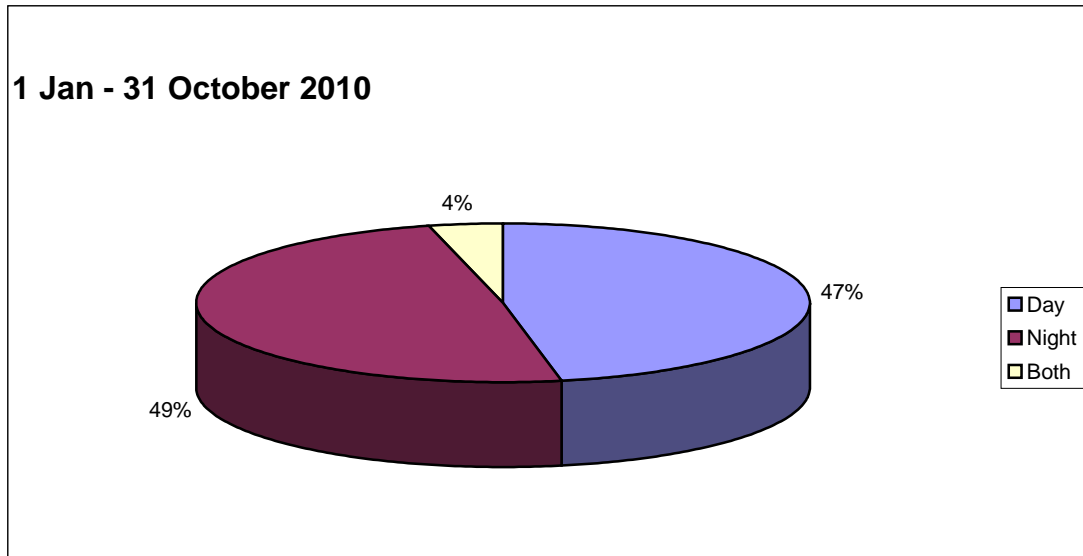
## Complaints by Area



## Complaints by Time of Day

2008





**2.18** The previous two years have shown significant increases in the amount of complaints about night noise. In 2009 this was largely attributed to publicity surrounding the draft Noise Action Plan and a somewhat erroneous press article that suggested that there would be a significant increase in the number of night flights utilising the Airport. The actual number of night movements actually dropped during the period in question. Another factor is the increasing awareness of the complaints service.

**2.19** However, during the 2009 – 2010 period procedural changes were made to the operation of the night mail flights. Partly as a result of comments received during the consultation on the Noise Action Plan but also for safe operational reasons it was decided to alter the operation of the mail night flights to take off into the wind rather than default to easterly departures. This has resulted in some well-orchestrated local campaigns that have resulted in a large number of pro-forma complaints being submitted from communities under the westerly departure route. This situation is being kept under review. Discussions with the local communities, the Consultative Group and Environmental Health Officers will continue to examine the evidence and make procedural changes accordingly, with the expressed intention of reducing the number of people subject to noise disturbance.

**2.20** Other measures are roughly comparable, although we have amended some of the categorisations to more accurately reflect the nature of complaint.

### 3. Third Schedule – Night Time Operations

<p>(i) <i>The Airport Company will use reasonable endeavours to ensure that Aircraft will not be permitted to use reverse thrust braking at Night Time (between the hours of 23:30 – 06:00 hours) except where it is essential for the safe operation of the said aircraft.</i></p> <p>2. <i>The Airport Company will ensure that no circuit or Training Flights (means a flight that is for the sole purpose of testing or training flight personnel, testing aircraft, their engines or accessories) take place at Night Time.</i></p> <p>3. <i>The Airport Company will carry out its operations at the Airport in such a way that the Night Time Quota (means the maximum permitted sum of the Quota Counts of all aircraft taking off or landing at the Airport at Night Time during the Noise Year) is not exceeded.</i></p> <p>4. <i>No Aircraft with a Quota Count (means the amount of the Quota assigned to one take-off or one landing by the aircraft in question, this number being related to its classification as set out in the Notice (the London Heathrow, London Gatwick and London Stansted Airports Noise Restrictions Notice 2007 or any subsequent notice made under Section 78 of the Civil Aviation Act 1982 or any re-enactment with or without modification of that section)) value of 8 or 16 will be allowed to arrive at or depart the Airport at Night Time nor shall an Aircraft with a Quota Count value of 4 be scheduled to arrive at or depart the Airport at Night Time.</i></p> <p>5. <i>Paragraphs 1 –4 shall not apply to:</i></p> <ul style="list-style-type: none"><li>(i) <i>Operations by Military, police and Support Aircraft</i></li><li>(ii) <i>Arrivals and departures by members of the Royal Family and other heads of states.</i></li><li>(iii) <i>Air / Sea operations.</i></li><li>(iv) <i>Emergency oil dispersal operations.</i></li><li>(v) <i>Operational diversions by aircraft due to weather, technical problems, security alert, industrial dispute or onboard emergency.</i></li><li>(vi) <i>Relief flights for humanitarian purposes where there is a special urgency.</i></li><li>(vii) <i>Movements suffering unavoidable operational delay, where it would lead to serious congestion at the airport, serious hardship or suffering to passengers or animals.</i></li><li>(viii) <i>Early arrivals of aircraft (other than those with a Quota Count exceeding 4) that took off and were scheduled to land after 06:00 hours.</i></li><li>(ix) <i>Medical emergency flights.</i></li></ul>
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#### **Action taken**

**3.1** In relation to Night Time training the AIP, referred to in Schedule 2, sets out the restrictions to Training Circuit Flights after 2130hours.

**3.2** We previously reported how different aircraft were ascribed different noise quota count points. No aircraft with a QC value of 8 or 16 has utilised the Airport at night-time nor has an aircraft with a QC value of 4 been scheduled to operate at night-time. The aircraft operated by our main airlines are increasingly of a variant that offer considerable improvements in the noise footprint (notably Boeing 737-800s).

## 4. Fourth Schedule – Night Time Noise Budget

1. The Night Time Quota for the Initial Night Time Quota Period shall be a Quota Count of 3,100 points per Noise Year (*means a summer season (means the period of time where British Summer Time is the local time at the Airport) and the immediately following winter season (means the period of time where Greenwich Mean Time is the local time at the Airport)*) save that aircraft movements listed in Third Schedule paragraph 5 shall not count towards this budget. Points that are unused in any season shall not be carried forward to subsequent seasons.

2. At least six months before the expiry of the Initial Night Time Noise Quota Period (*the period of five years following the beginning of the first Noise Year following Commencement of Development (development registered as having commenced 10.12.07)*) the Airport Company shall propose in writing to the Council together with reasoned justifications the Night Time Noise Quota it proposes for the next 5 year period.

3. Within four months of the receipt of any proposal by the Airport Company under paragraph 2 the Council will notify the Airport Company in writing either that it approves the proposal or that it does not approve it and if so make alternative proposals and give reasonable justification for them.

4. In the event that a proposal submitted under paragraph 2 is not approved the Airport Company will make further proposals to the Council within 2 months of the receipt of notice from the Council that it is not approved and the Council will respond approving the amended proposals or making alternative proposals and reasoned justification for them within a further two months.

5. The process in paragraph 4 shall be repeated until agreement is reached save that if either party consider that they are unable to reach agreement the matter may be referred to a Specialist under clause 9 of this Agreement (*a person qualified to act as an expert in relation to the dispute*).

6. The Specialist shall hear representations from both parties and take account of the following considerations:

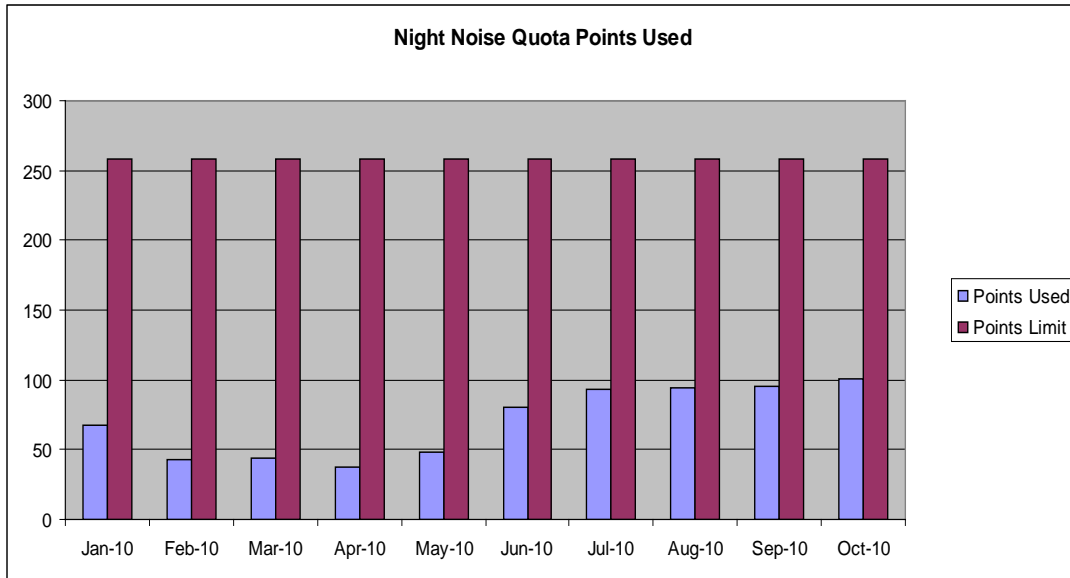
- (i) Night time noise impact in the preceding years,
- (ii) Night time noise complaints,
- (iii) Past and future air traffic movements for night time,
- (iv) The economic, social, environmental and commercial impacts of the proposed noise budget,
- (v) Policies and budgets at other relevant UK regional airports,
- (vi) National or regional policy Guidance that may be relevant,
- (vii) Economic and social benefits existing or projected in relation to the Airport

7. The procedure set out in paragraphs 4 – 6 shall be repeated prior to the expiry of each successive Night Time Quota period until agreed by the parties or set by the Specialist.

8. Where the Night Time Quota for any individual Noise Year has not been agreed or set by a Specialist two months before the expiry of the previous Noise Year the Airport Company will continue to comply with the last agreed Night Time Quota until the Winter Season or the Summer Season (as the case may be) following the agreement or setting of a new Night Time Quota whereupon the Airport Company will comply with the new Night Time Quota.

## Action Taken

**4.1** The initial Noise Year commenced at the start of the summer season 2008 and ran through to the end of the winter season 2009, so we are only a part of the way through the 3<sup>rd</sup> Noise Year as defined by the Agreement wording. The diagram below shows how the quota has been 'spent' this calendar year.





## 5. Fifth Schedule – Surface Access

1. Prior to the occupation of the development to submit to the Council plans for the approval of improved bus services between the Airport and the Bournemouth Interchange (or other such route as may be agreed) at the Airport Company's expense, such scheme to provide for:

- (i) A bus service which runs at a minimum of hourly intervals commencing at 7am and ending at 7pm or for be agreed with the Council;
- (ii) Suitable covered waiting facilities at facilities at the Airport to include Real Time Bus information at locations to be agreed with the Council;
- (iii) Publicising the bus services and running times;
- (iv) Facilities for the transportation of large items of luggage;
- (v) Measures to encourage passengers and staff to use the bus service;
- (vi) The submission of quarterly patronage figures to the Council; and,
- (vii) A date for the implementation of the scheme if agreed,

Provided always that where the quarterly patronage figures show that the bus services are running at less than 50% of capacity for two successive quarters the Airport Company may submit a revised scheme to the Council for approval including alternative routing strategies or formats to encourage greater use of the bus services and once approved by the Council will implement the revised scheme within a timescale to be agreed in writing by the Council.

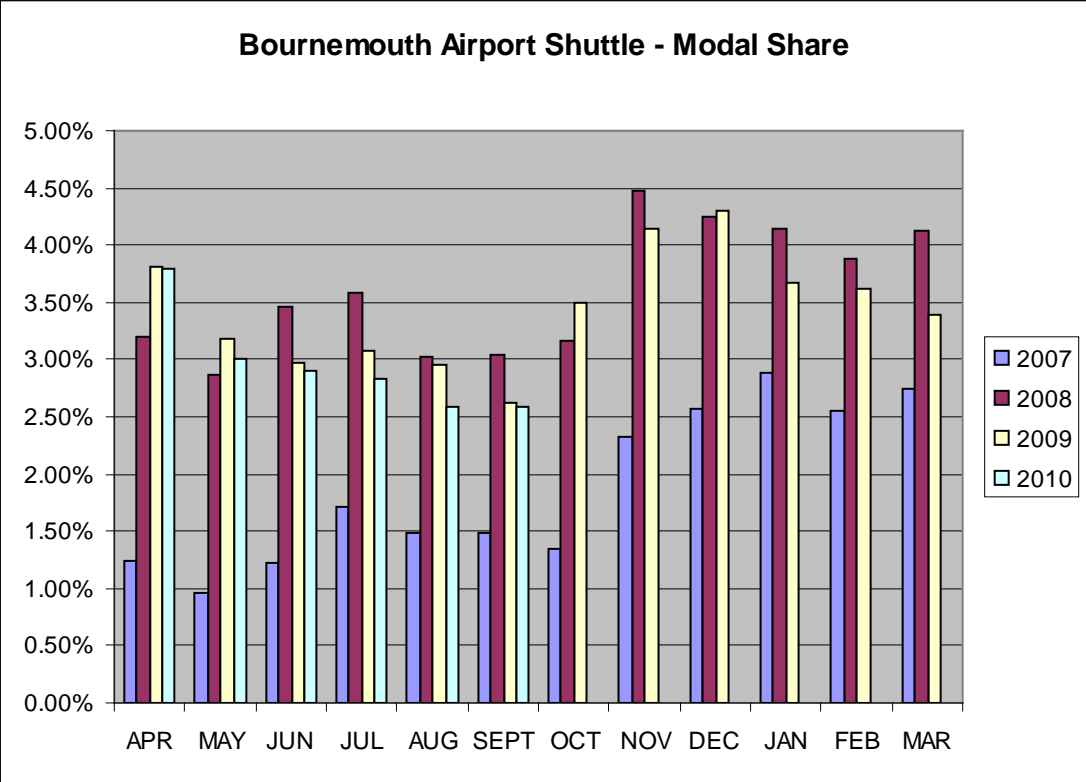
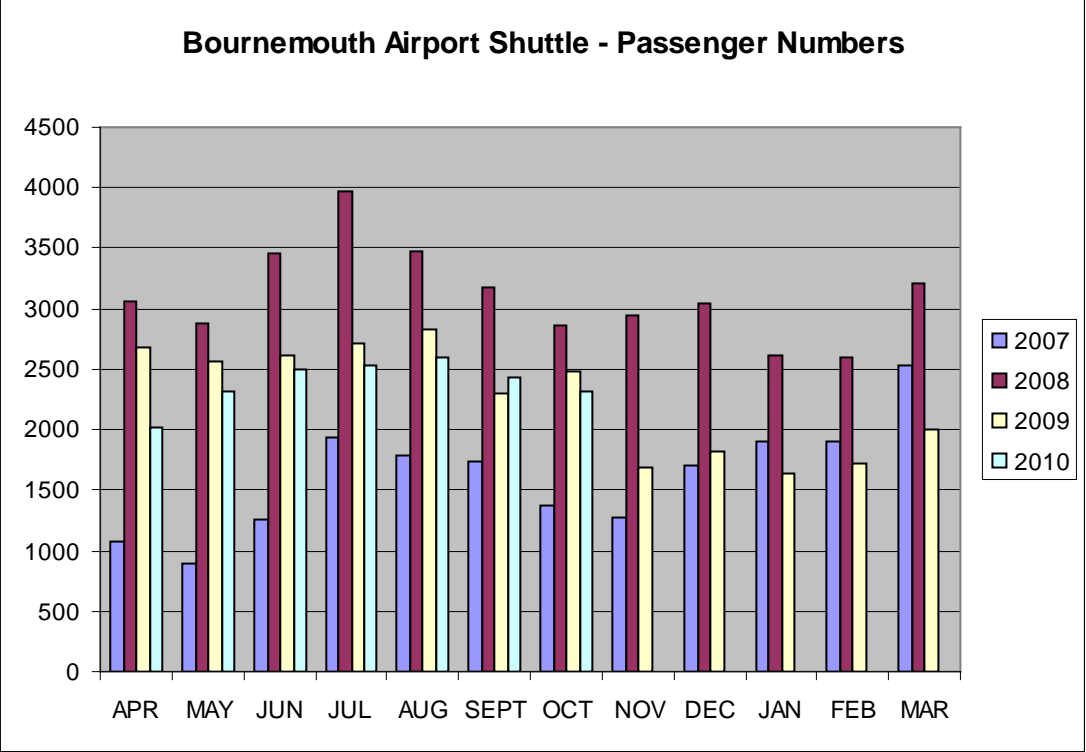
### **Action taken**

**5.1** The bus service operated by Discover Dorset commenced operation in November 2007. The new Optare Versa vehicle is equipped with Real Time Passenger Information (RTPI) and with adequate luggage capacity for the airport market. The service has operated 7 days a week, 362 days a year, between the hours of 7.00am and 7.00pm.

**5.2** Passenger numbers and modal share are reported at each Bournemouth Airport Transport Forum. The Forum meets on a bi-annual basis and is attended by key transport providers, Local Authority representatives and interest groups.

**5.3** The bus currently utilises an existing bus stop at Bournemouth Airport, however, within the Terminal development plans there will be improved bus stop and waiting facilities made available for the service, incorporating RTPI boards. The Shuttle service was presented with the award for Transport Initiative of the Year at the Bournemouth Tourism Awards in early 2009.

**5.4** Passenger figures for the bus service are reported at each Bournemouth Airport Transport Forum and are available at any other time on request. This winter, because of the reduction in the number of flights, it has been decided to operate a reduced service until February when the schedules are reintroduced.



*2. The Airport Company shall maintain an Airport Transport Forum to inform, monitor and review the Surface Access Strategy including any Green Travel Plan.*

### **Action taken**

**5.6** All airports in England and Wales with more than 1,000 passenger air transport movements a year are required (The White Paper “A New Deal for Transport” CM3950) to set up an Airport Transport Forum and prepare an Airport Surface Access Strategy. The Airport established an Airport transport Forum in 2005. The Bournemouth Airport Transport Forum was re-launched and reconstituted in August 2007, so that its membership has been bolstered and it now meets on a bi-annual basis. Membership is drawn from Local Authorities at both Member and Officer level, Companies across the Airport site, Transport providers and interest groups. Minutes of each meeting are taken and distributed to both attendees and others on the full distribution list.

**5.7** The Surface Access Strategy Targets are for a 20% reduction in peak time private car use by Airport Employees by 2010, a 5% reduction in private car use by Air Passengers by 2010, annual year on year growth in the use of the Airport Bus Service and the development of Workplace Travel Plans for Airport employees.

*3. On the Commencement Date to implement the Interim Green Travel Plan.*

### **Action Taken**

**5.7** Previously details of the Green Travel Plan were reported along with details of travel surveys that were undertaken. A Travel Plan co-ordinator has been in place for the review period and the following sets out a summary of progress against Green Travel Plan measures.

**5.8** In March 2009 Bournemouth Airport launched the cycles scheme initiative for employees. This salary sacrifice scheme entitles employees to hire a bicycle over a 12-month period. The employee doesn't pay tax, VAT or National Insurance and can make a saving of up to 50% of the cost of the bicycle. This scheme was refreshed in spring 2010 and a total of 37 Bournemouth Airport employees have now taken advantage of this scheme which represents 25% of Airport employees. As part of the European Mobility week the Airport promoted a 'Green Travel to work' day. 27 staff cycled to work on that day.

**5.9** Bournemouth Airport has registered with the Car Share scheme as a 'public group' to match drivers with potential lift share passengers. A total of 127 people across the site have so far registered with the scheme.

**5.10** In 2009 the national cycling charity Sustrans confirmed funding for a new cycle route that will be developed between Throop and Hurn Forest. This route will create a vital link between the residential areas of north Bournemouth and the Airport, enabling members of staff at the Airport and the industrial estate to cycle to work. This project will be undertaken by Dorset County Council who are liaising with the Airport's Travel Plan Co-ordinator to finalise the route design, which includes the construction of two new cycle-friendly bridges. Liaison is still on-going with regard to detailed design.

**5.12** An annual Tenants Meeting has been set up to engage with businesses located across the two industrial estates. The key discussion points include sustainability and the environment; travel to work initiatives and planning issues. It is a vital opportunity to share best practice and disseminate information regarding key transport issues in the local area.

*4. Within three months of the Occupation of the Development to appoint an independent highway consultant to carry out a Travel Monitoring Survey of the travel characteristics, total trips and modal split of users of the Airport.*

*5. The Airport Company will submit a report containing the results of the Travel Monitoring Survey referred to in paragraph 4 to the Council within 12 months of the appointment of the independent highway consultant. The report shall include progress towards meeting agreed targets and details of any remedial measures proposed to include such progress.*

*6. The obligations referred to in paragraphs 4 and 5 shall be repeated annually thereafter unless otherwise agreed in writing by the Council.*

*7. Within 18 months from the occupation of the development and thereafter on or before every third anniversary of the last approval of a Green Travel Plan, submit a Revised Green Travel Plan to the Council for its approval. The Revised Green travel Plan shall be informed by:*

- (i) Information included in the Travel Monitoring Surveys and*
- (ii) Planning policy in force at the time the Revised green Travel Plan is produced.*

### **Action taken**

**5.13** The 2008 Report set out the work of undertaken by PBA in 2007 to conduct detailed Travel Monitoring Surveys. Progress in acting on that survey information is reported above. Traffic counters have, for a third year, been installed to record traffic movements for a one month period to measure total trips into and out of the site. The plan below shows the location of the counters and the following tables illustrate three years comparative data. It should be noted that the first day's data for the 2008 count at Site 2 was discounted as the data had been corrupted.



<b>Entrance - Site 1 - Northbound</b>								
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Week Total
2 – 8 Oct 2008	3360	3004	2243	1803	2759	2899	2860	18928
27 Jul – 2 Aug 2009	2306	2175	2441	3360	2303	1764	1356	14560
7 – 13 Sept 2010	2319	2421	2680	2240	2307	1849	1711	13127

<b>Entrance – Site 2 - Northbound</b>								
	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Week total – minus day 1
<b>2 Oct - 8 Oct 2008</b>	0	1262	2178	1870	2258	2451	2234	12253
<b>27 Jul - 2 Aug 2009</b>	2052	1933	2161	1944	2032	1752	1345	11167
<b>7 Sep - 13 Sep 2010</b>	2149	2216	2485	2061	2135	1901	1723	12521

**5.14** During the course of the surveys the NATS college has been gradually reducing its scale of operation on-site, with staff transferring to the Fareham offices. Coupled with the downturn in passenger traffic this has led to a continuing reduction in the number of cars accessing the Bournemouth Airport, see Site 1 figures above. Despite this there is an apparent discrepancy with what appears to be an increase over the previous years' figures in the level of traffic passing count site 2. The count 2 site is used to disaggregate traffic that is not directly related to the operation of the Airport, by removing the traffic associated with the NATS operation. The discrepancy can be explained by the increased amount of construction traffic related to the terminal development scheme. The overall pattern is for a decreasing amount of traffic entering the site.

**5.15** The work of the Travel Co-ordinator will continue to develop and the implementation of effective marketing and awareness campaigns to promote travel-planning initiatives on and off site will progress. The demonstration of the progress and success of initiatives will continue through and beyond the Surface Access Forum as will the building of relationships with external stakeholders and transport operators to secure best value offers for travel initiatives..

## 6. Sixth Schedule – Highway Works

1. *The Airport Company covenants with the Council:*
  - (i) *Within seven working days of the Commencement of Development to pay the First Highways Contribution to the Council to be used to fund the Highway Works.*
  - (ii) *Within twelve months of the Commencement of Development to pay the Second Highway Contribution to the Council to be used to fund the Highway Works.*
  
2. *The Council covenants with the Airport Company:*
  - (i) *Subject to paragraph 3 below to forward the First Highway Contribution and the Second Highway Contribution to Dorset County Council as highway authority within one month of receipt from the Airport Company for use by Dorset County Council for the purposes only of the Highway Works.*
  - (ii) *To repay any part of the First Highway Contribution and the Second Highway Contribution which has not been spent by Dorset County Council or that Dorset County Council have not entered into a contract to spend within 10 years of the date of payment of the Second Highway Contribution to Dorset County Council under paragraph 2(i) above.*

### **Action Taken**

**6.1** A first payment of £100,000 was made to Christchurch Borough Council on 17.12.2007. A second payment of £800,000 has through negotiation with Christchurch BC, been delayed in recognition of the delay in progressing the terminal project, the downturn in passenger numbers and the reasonable prospects of the required highway works actually progressing in the short-term.

**6.2** Christchurch BC made the first payment to Dorset on 6<sup>th</sup> May 2008.

## 7. Seventh Schedule – Community Fund

1. Prior to the occupation of the development, the Airport Company will establish a fund. The objective of the fund is to provide funding for environmental improvement and community and recreational projects within the Council's administrative area.

2. The Airport Company will make an initial contribution of £10,000 to the Community Fund and a further contribution annually thereafter on each anniversary of the establishment of the Community Fund provided always that the further contributions to the Community Fund shall be as set out below and will take effect in the financial year following the increase in the annual passenger throughput:

- (i) £10,000 when the annual passenger throughput at the Airport is less than 1.5 million passengers per annum
- (ii) £15,000 when the annual passenger throughput at the Airport is first more than 1.5 million but less than 2 million passengers per annum
- (iii) £20,000 when the annual passenger throughput at the Airport is first more than 2 million but less than 2.5 million passengers per annum
- (iv) £25,000 when the annual passenger throughput at the Airport is first more than 2.5 million but less than 3 million passengers per annum
- (v) £30,000 when the annual passenger throughput at the Airport reaches 3 million passengers per annum.

3. In addition to the annual contributions referred to in paragraph 2 above the Airport Company will also contribute any monies raised from environmental penalties from aircraft operations to the Community Fund.

4. The Community Fund will be administered by a committee of four members, three of whom will be appointed by the Council and one by the Airport Company.

5. The first Chairman of the Community Fund shall be the member appointed to the committee by the Airport Company and thereafter shall be rotated annually between the Council and the Airport Company.

6. The operational criteria for the Community Fund its management and guidelines for assessing projects shall be drawn up by the members appointed under paragraph 4. The committee will meet annually (or at such other interval agreed by the members) to review and award applications to the Community Fund.

7. Day-to-day administration of the Community Fund, and the availability of appropriately qualified person(s) to administer it shall be undertaken by the Airport Company at its sole expense which costs of administration are declared to be over and above the sum contributed annually by the Airport Company to the Community Fund. For the avoidance of doubt administration shall include the assessment of submitted projects by appropriately qualified persons, and consultation and advice from the Council and the receipt of applications, administration of all correspondence to community organisations and the committee and provision of minute taking.

8. Any monies not spent in one financial year shall be carried over to the following year.



## **Action Taken**

**7.1** On 23<sup>rd</sup> January 2008 the Airport Company, in conjunction with Christchurch Borough Council, launched the Bournemouth Airport Community Trust Fund, by making £10,000 available per annum to community, social, recreational and environmental groups within the Borough of Christchurch.

**7.2** The fund has four very clear objectives:

- to bring the community closer together through facilities for sport, recreation, and other leisure activities
- to offer environmental improvement and/or heritage conservation
- to improve awareness of environmental issues through environmental education
- to encourage and/or protect wildlife.

**7.3** Access to the Fund brochure and application pack is via both the Airport's and Christchurch Borough Council's websites.

**7.4** The Fund's management committee is made up of three representatives from Christchurch Borough Council and one representative from Bournemouth Airport and they shall meet twice a year to consider and award grants to eligible projects. The current committee is made up of Christchurch Councillors Mrs Dereham-Wilkes and Duckworth, Judith Plumley, the Head of Neighbourhood and Environment at CBC and Sally Windsor as the Airport representative. Councillor Duckworth was Chair of the committee this year.

**7.5** Two meetings of the Committee took place during 2010 (May & November).

**7.6.** During this review period 5 awards have been made totalling £11,940. This is in excess of the £10,000 annual contribution as a result of an underspend in the first two years of the fund's existence. Awards were made to the following:

- Christchurch Football Club
- Highcliffe Sailing Club
- Mundeford Sea Scouts
- Portfield Community Hall
- Stomping on the Quomps.

**7.7** The fund has a remaining balance of £6,346.27 that will be added to next year's £10,000 contribution as the 'pot' to be bid against next year. The next meeting of the Fund Management Committee is scheduled to take place in May 2011.

## 8. Eighth Schedule – Public Art

*1. Within six months of the Commencement of Development the Airport Company shall submit to the Council a scheme for Public Art for the Council's approval. The Scheme shall provide for a high quality piazza area within the development incorporating locally commissioned art works artefacts displays or interpretative material relating to (but not exclusively) the history of aviation at the Airport.*

*2. The Airport Company shall complete the Public Art Scheme within twelve months of written approval being given by the Council.*

### **Action Taken**

**8.1** As part of the planning permission a high quality landscaping scheme was approved. This included specimen trees, high quality paving and street furniture and other decorative features as well as a commitment to provide some form of public art. The area is backed by a 3.5 metre high 45m long screen wall, which links the departures and arrivals buildings.

**8.2** In discussions with Christchurch Borough Council on a draft scheme for the public art element it was agreed to explore options for the treatment of the screen wall to showcase the history and development of aviation in the area and of Bournemouth Airport itself.

**8.3** As reported in the Introduction to this report, the delivery of the terminal scheme has been subject to change in that the arrivals building and the departures building are now running on different schedules. Delivery of the public art scheme and the landscaped area will now be carried out as a part of the delivery of the arrivals building. The previously reported changes to security requirements at Airports and the need to maintain safe zones around terminal buildings will have an influence on the scheme that can be progressed. Discussions will progress with Christchurch Borough Council about the detail of what can be delivered, but the principal of public art still very much forms a part of the thinking.

## 9. Ninth Schedule – Air Quality

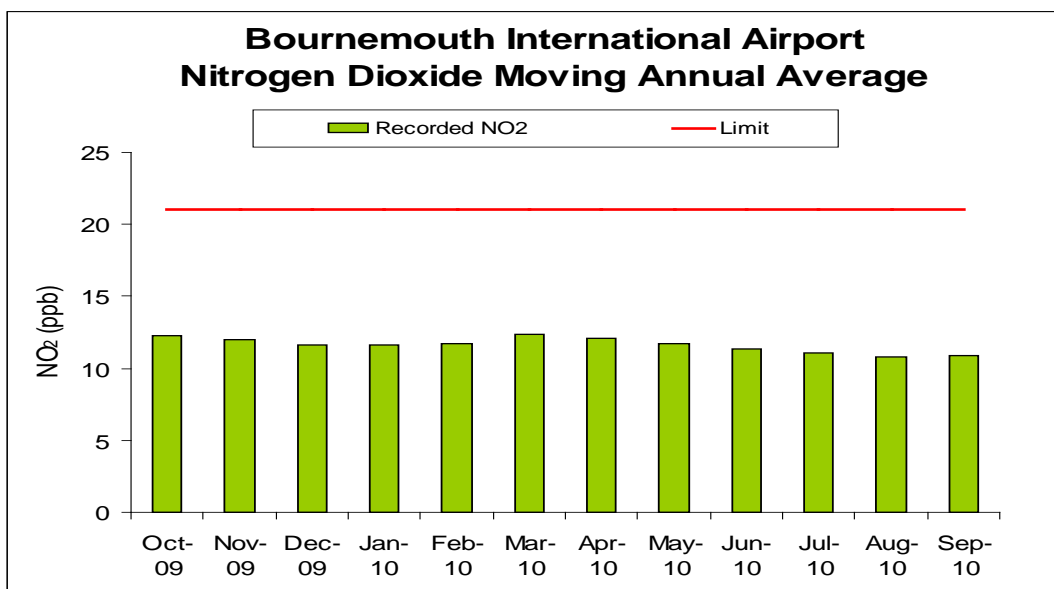
1. *Within six months of Commencement of Development to submit an Air Quality Monitoring Scheme to the Council for their approval, such scheme to include:*
- (i) *Measures to enhance the Airport's nitrogen dioxide diffusion tube monitoring programme at agreed sensitive receptor locations around the Airport focusing on the areas within or adjacent to the SAC;*
  - (ii) *Means to primarily establish a vegetation monitoring programme through permanent quadrats. This will involve comparison between vegetation quality within a control quadrat, located remote to the airport, and vegetation quality within a number of test quadrats (the number and location to be first agreed in writing by the Council);*
  - (iii) *Procedures to provide reports from both monitoring programmes will be made available to the Airport Consultative Committee; Council and Natural England;*
  - (iv) *Provision of agreed trigger levels and response measures having regard to the levels of impact predicted in the Environmental Statement.*

### **Action taken**

**9.1** An Air Quality Monitoring Programme Proposal has been submitted to Christchurch Borough Council and was agreed as a reasonable way to proceed. The scheme added another seven locations for positioning nitrogen dioxide diffusion tubes including a control site adjacent to Porchester School.

**9.2** The Proposal also set out a protocol for the establishment of a vegetation monitoring program to more directly assess the effects of nitrogen deposition on the vegetation within the designated heathland surrounding the Airport. This led to further diffusion tube coverage. A number of test quadrats within the heathland areas have been identified and these have been tested against results drawn from remote quadrats. Consultants independent of the Airport will carry out this work.

**9.3** The Proposal also set out a reporting mechanism and a protocol for identifying trigger levels and response measures, in line with the requirements of the Section 106 Agreement.



**Action taken**

**9.4** Sections 2-4 have yet to be triggered as the submitted Air Quality Monitoring Scheme has yet to be approved by the Council.

2. To implement the Air Quality Monitoring Scheme approved by the Council under paragraph 1. If the results from the Air Quality Monitoring Scheme demonstrate increased levels of Nox deposition attributable to the operation of the Airport for two successive years, the Airport Company will;

- (i) Submit a scheme of air quality response measures to the Council for their approval. Such response measures might include: fines for the most polluting aircraft; lower charges for the least polluting aircraft, the introduction of low polluting airport ground support vehicles and plant.
- (ii) Implement the scheme approved by the Council under paragraph 2(i) within one month of the scheme being agreed by the Council.

3. In the event that the Council and the Airport Company are unable to reach agreement on the air quality response measures required the matter may be referred by either party to a Specialist under clause 9 of this Agreement. In determining the air quality response measures required the Specialist shall consider:

- Changes in type, design and technology of aircraft using the Airport;
- Advances in medical and scientific knowledge and understanding in relation to operations of aircraft and NOx deposition.

4. The Council and the Airport Company shall accept the decision of the Specialist and the Airport Company agrees that it will give effect to the air quality response measures determined by the Specialist within such timescale as the Specialist may determine.

## 10.Tenth Schedule – Carbon Management Action Plan and Carbon Audit

1. Within twelve months of Commencement of Development to submit a Carbon management Action Plan for the Operational Vehicles and energy use at the Airport to the Council for their approval setting out measures to seek to achieve a carbon neutral status by 2015 to include:

- (i) Measures to reduce carbon emissions at the Airport;
- (ii) Measures to increase the use of renewable energy at the Airport;
- (iii) A Carbon Offset scheme;
- (iv) Measures for the phased introduction of carbon neutral ground operational vehicles and energy use at the Airport by 2015;
- (v) A programme for the implementation of the measures included in the Carbon Management Action Plan; and
- (vi) Provision for an annual report on the measures taken.

2. To implement the Carbon Management Action Plan within one month of written approval being given by the Council.

3. Within 12 months of the Commencement of Development to undertake and complete a carbon audit of Aircraft on the ground and in the landing / take off cycle, operational vehicles and energy use at the Airport; and to repeat the carbon audit every five years thereafter. The Airport Company will supply a copy of the Carbon Audits to the Council upon request.

### Action Taken

**10.1** Work has advanced with the preparation of a Carbon Management Reduction Plan. Environ UK completed a Carbon Audit based on 2006 data early in 2008, in order to calculate a carbon footprint. The results of this were set out in the 2008 Report and are reiterated in the Management Plan. These have been updated in the Management Plan and are set out for reference below. The Management Plan was been submitted to Christchurch BC. Updates have been carried out since then using the Environ methodology. The Manchester Airport Group remains committed to ensuring that its Airports will be carbon neutral in their energy use and operations on the ground.

**10.2** In common with the approach set out in the Greenhouse Gas (GHG) Protocol there is now established guidance setting out the process for assessing and reporting carbon emissions. The GHG Protocol requires that emissions are reported against one of three scopes:

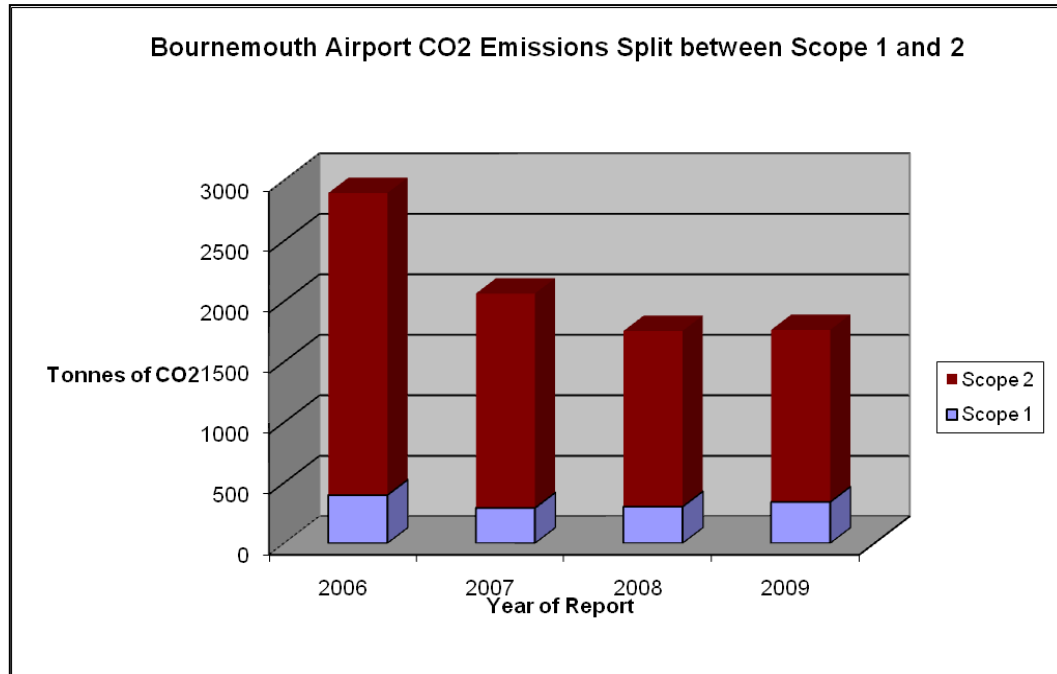
Scope 1 – Direct emissions that occur from sources that are owned or controlled by the company, e.g. emissions from boilers and vehicles.

Scope 2 – Indirect emissions occurring due to the consumption of purchased electricity by the company.

Scope 3 – An optional reporting category, that allows for the consideration of other indirect emissions occurring as a consequence of the company.

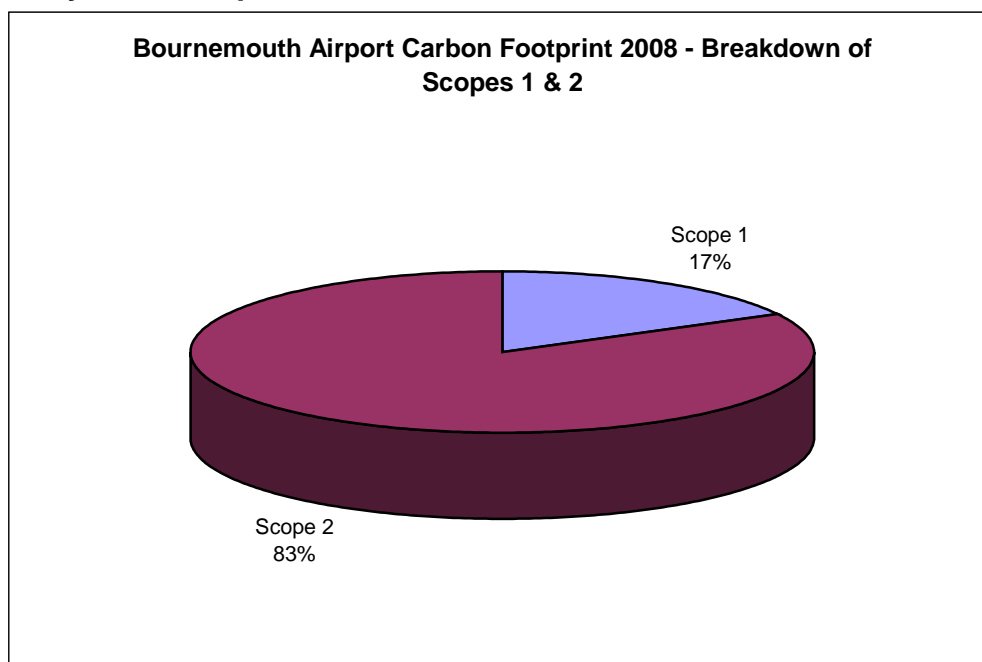
BIA first calculated its carbon footprint in 2006 and the Airport will continue to calculate and report its carbon footprint annually. The estimated scope 1 and 2 emissions are included below:

### Bournemouth Airport Carbon Footprint (Scopes 1 & 2)



**10.3** Further consideration of those emissions in Figure 1 shows that most emissions arise as a result of the consumption of electricity, the use of oil for heating and vehicle emissions. The split between these sources (based on 2009 data) is included below as Figure 2.

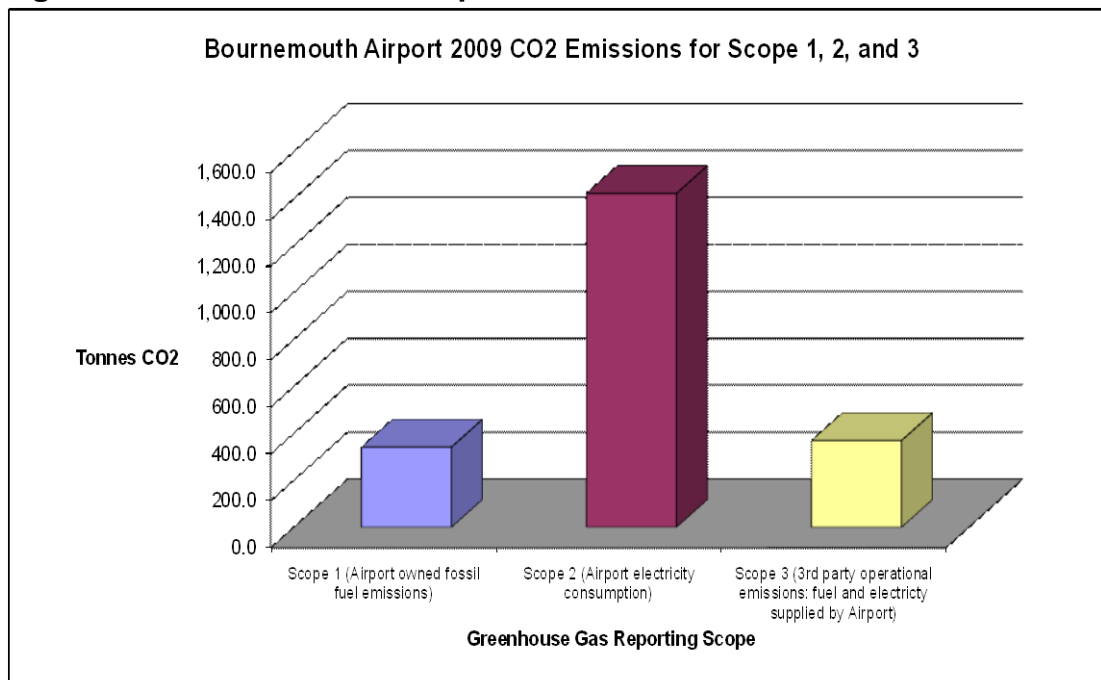
### Analysis of Scope 1 and 2 Emissions for BIA



In fulfilling the commitment made in the planning agreement with CBC the Airport will achieve carbon neutrality for all of its own emissions, as defined by Scope 1 and 2 of the GHG Protocol no later than 2012.

- 10.4 Most emissions at the Airport arise not from the activities of the Airport Company but from operations by business partners, such as airlines, their agents and retailers. By committing to tackle emissions from operational vehicles and energy use, BIA seeks to go beyond its own emissions, to influence the on site operations of its business partners. Therefore BIA includes within its commitment that part of its scope 3 emissions that are attributable to the energy (electricity and oil) supplied by it to other business partners operating on the Airport. Whilst the Airport will seek to influence emissions from business partners on the adjacent business park and those emissions arising from energy procured directly by business partners these emissions do not form part of the commitment made in the agreement with CBC.
- 10.5 The inclusion of emissions from on airport business partners increases the Airport's commitment considerably. This is shown in Figure 3 below:

**Figure 3: Bournemouth Airport's Carbon Neutral Commitment**



## **10.6** Green Tariff Electricity

BIA supports the generation of electricity from renewable sources and since 2004 the Airport has purchased a proportion of its electricity from sources that are exempt from the climate change levy (CCL), or 'green tariff'. In calculating its emissions all of the information provided in this management and action plan assumes that the emissions from these sources of electricity generation are zero rated. This has been long standing practice and was recommended by DEFRA's emission factors at the time the Airport entered into the agreement with CBC.

**10.7** Following consultation the Government has recently published revised guidance to those companies wishing to measure and report greenhouse gas emissions [3]. Government guidance now suggests that the green tariff electricity purchased by BIA should no longer be zero rated but should be treated as if it were obtained from the national mix of power generation supplied from the National Grid. For the purposes of describing, measuring and reporting progress against the commitment made in the agreement with CBC BIA will continue to use the rules and procedures that were in effect at the time that the agreement was entered into.

## **10.8** Approach to Emissions Reduction

In order to achieve emissions savings in a systematic and prioritised way BIA will follow the 'carbon ladder' approach, as set out below in Figure 4.

**10.9** By following this approach BIA will ensure that, in the first instance, energy demand is reduced using prudent design or efficiency measures. Energy saving is usually the most cost effective way to reduce emissions and BIA believes it is important that all organisations seeking to achieve carbon neutrality work hard to reduce their energy demand to a minimum.

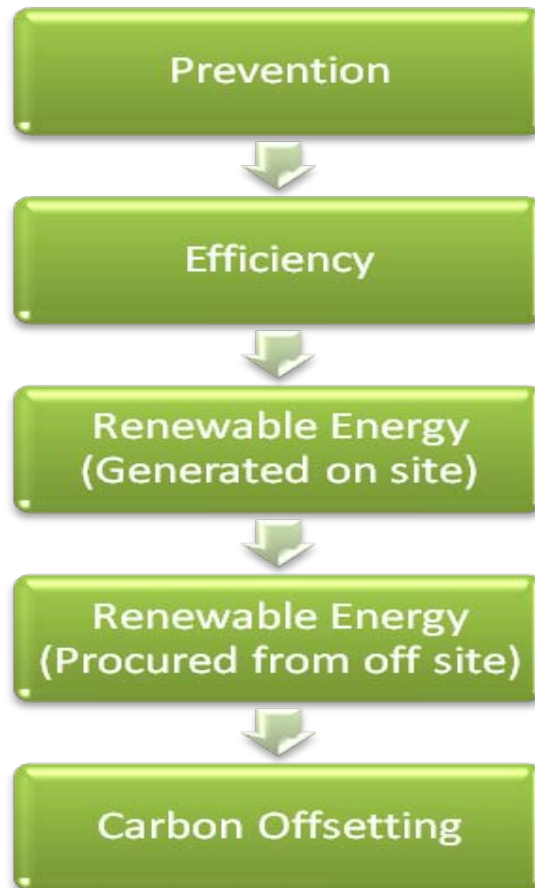
**10.10** BIA will, however, continue to have a very significant energy demand and in the first instance the Airport will seek to meet this demand, where it is practical to do so, from on site heating and generation plant using renewable sources.

**10.11** BIA will continue to support the generation of electricity from renewable sources and, where it is not practical to meet energy demand using on site resources, will seek to purchase energy from renewable sources.

**10.12** Finally and, where no reasonable alternative exists, BIA will compensate for residual emissions by undertaking compensation or mitigation activity.



**Figure 4: The Carbon Ladder**

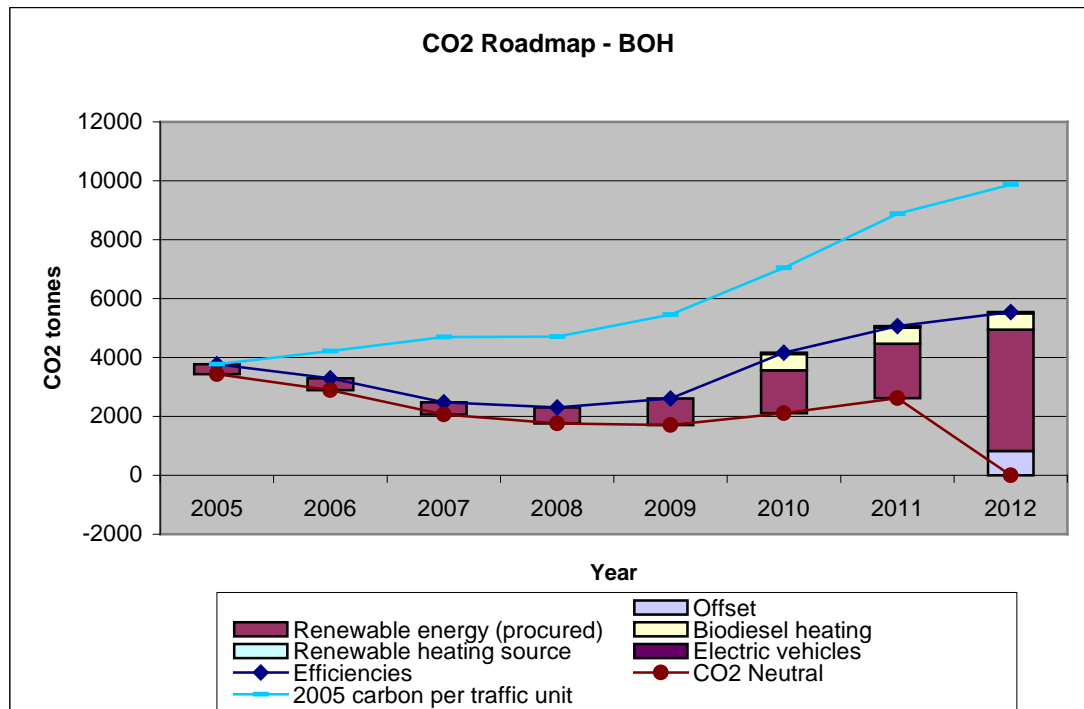


**10.13 The Carbon Neutral Road Map**

By applying the approach set out by the carbon ladder, the Airport has developed a plan to achieve the carbon neutral commitment. The current plan is presented, in the form of a 'roadmap' as shown in Figure 5 below.

**10.14** The top line of the roadmap (light blue) shows that at 2005 the carbon intensity of operations at BIA was 3.98 Kg of CO<sub>2</sub> per traffic unit (a traffic unit being either 1 passenger or 100Kg of air freight). For illustrative purposes this line has been projected forward to 2012, so that the total emissions that would have arisen had this carbon intensity been maintained can be seen.

**Figure 5: The BIA Carbon Neutral Roadmap**



**10.15** The second line of the roadmap (dark blue) shows the emissions that would result should BIA's residual energy demand be met by fossil fuels. It can be seen that by the application of prevention through design and energy efficiency improvements the carbon intensity of operations is forecast to reduce to 2.21 Kg of CO<sub>2</sub> per traffic unit by 2012. One of the key underlying drivers for this is the development of a new terminal complex.

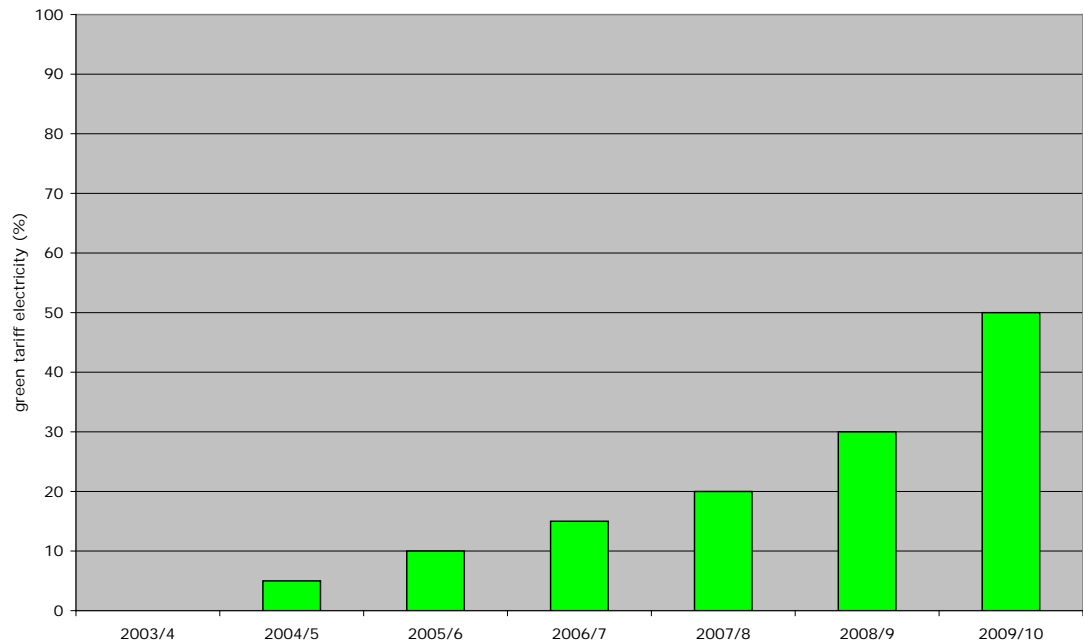
**10.16** The roadmap estimates that at 2012 the residual emissions associated with the operation of buildings and vehicles at BIA will be 5,541 tonnes of CO<sub>2</sub> per annum. Whilst it will be necessary to update the roadmap annually, at the time of writing the following measures are planned to reduce this to zero.

**10.17** Energy use

A biodiesel boiler developed in the new departures terminal in 2010 will save over 500 Tonnes CO<sub>2</sub> per year. One is also planned for the Airport fire station that will save around 40 tonnes per year.

**10.18** To support the generation of electricity from renewable sources BIA has been purchasing green tariff electricity since 2004. The proportion of electricity obtained in this way has increased as shown in Figure 6 below:

**Figure 6: Electricity From Renewable Sources**



**10.19** This proportion will be progressively increased so that by 2012 100% of electricity will be purchased from sources exempt from climate change levy. BIA estimates that this will result in annual savings of 4,122 tonnes.

**10.20** Operational vehicles

BIA believes that in time the use of alternative fuels such as electricity, bio-diesel and bio-methane will offer an alternative solution to the operation of diesel vehicles. Bournemouth Airport took part in a 2 year trial of electric Smart Cars which finished in 2010. This cost around £10,000 in total and saved an estimated 2 tonnes CO<sub>2</sub> per year. It achieved a great deal through awareness raising and the opportunity to identify where conventional vehicles could be replaced. The airport is currently seeking a second generation electric vehicle to invest in now that the trial has ended. Trials of bio-diesel, hybrid and bi-methane vehicles are being undertaken at airports within the broader Manchester Airports Group and BIA will seek to apply the lessons from these trials where it is practical to do so.

**10.21** Due to the uncertainty associated with the outcome of this work no savings have yet been assumed in the roadmap. In 2008 the Airport's vehicles were estimated to result in 185 tonnes of CO<sub>2</sub> annually and

therefore the roadmap assumes that these emissions will be off-set by projects that result in a corresponding reduction.

**10.22** Whilst the commitment in the agreement with CBC only applies to those vehicles operated by the Airport Company, in order to influence all on site business partners the Airport is seeking to introduce a system of variable charges for on site vehicles. Those vehicles that continue to use diesel as a fuel will be surcharged and the proceeds used to off-set the resulting emissions. This change will be subject to consultation in 2010.

**10.23 Carbon Off-Set**

The roadmap assumes that emissions from vehicles and those oil fired boilers that cannot be replaced by 2012 will be off-set by projects that result in a corresponding reduction. In total the roadmap assumes that it will be necessary to off-set 828 tonnes of CO<sub>2</sub> annually from 2012.

**10.24** The projected savings assumed by the roadmap at 2012 are summarised in the table below, which is included as Figure 7.

**Figure 7: Projected Emission Savings (tonnes of CO<sub>2</sub> annually)**

Green Tariff Electricity	4,122
Biodiesel Heating (Terminal)	546
Renewable Heating (Fire Station)	44
Electric Vehicles	2
Offset	828

**10.25 Recent Initiatives to Manage and Reduce Greenhouse Gas Emissions**

**Carbon Trust Standard**

In 2010 Bournemouth Airport's achieved the Carbon Trust Standard along with East Midlands and Humberside Airports.

This required in depth analysis of 3 years of emissions data.

It is designed to provide a robust, objective and consistent methodology for assessing corporate carbon performance. The Standard specifies requirements in three key areas:

- Carbon footprint measurement
- Carbon management
- Carbon reduction performance

**10.26** Assessment against the Standard is undertaken by independent third-party assessors. The assessment process is managed by the Carbon Trust Standard Company - a subsidiary of the Carbon Trust. It builds on other existing international Standards for the measurement of corporate carbon emissions.

Initiatives in place to reduce carbon emissions further:

**10.27** Energy Efficiency Targets

Bournemouth Airport set the following target for both 2008/9 and 2009/10: A 5% saving in all energy use over the previous year. Both of these targets have been met. This target is classed as a Key Business Indicator and is reported regularly to Group Executive Director throughout the year.

**10.28** Monitoring

- An energy measurement system has now been installed across the Bournemouth Airport site that will allow for much improved energy monitoring. This is based on AMR data direct from half hourly meters. The system will be completed by the end of 2010 and will cover the main site substations. This will greatly improve the ability to monitor and manage energy use on site.
- Bournemouth Airport is now implementing an ISO14001 Environmental Management System. There are procedures within this system that ensure energy use is accurately recorded.
- The new departures terminal at BOURNEMOUTH AIRPORT has a Trend BMSsystem controlling all heating and cooling. This will maximise energy efficiency in this area.

**10.29** Investments

- Bournemouth Airport took part in a 2 year trial of electric Smart Cars which finished in 2010. This cost around £10,000 in total and saved an estimated 2 tonnes CO<sub>2</sub> per year. It achieved a great deal through awareness raising and the opportunity to identify where conventional vehicles could be replaced. The airport is currently seeking a second generation electric vehicle to invest in now that the trial has ended.
- Bournemouth Airport is investing £3M in the development of a low carbon arrivals terminal to replace the existing arrivals terminal. This incorporates sustainable passive design techniques and a large photovoltaic panel on the roof. This allows for a 70% improvement in energy terms on a typical baseline building of the same size. The introduction of photovoltaic panels on the roof means it will now be up to 100% better. The PV panels will generate 80-100 kWh and cost £355K.

- At Bournemouth Airport a biodiesel boiler in the new departures terminal will save over 500 Tonnes CO2 per year. One is also planned for the Airport fire station that will save around 40 tonnes per year.
- Other projects being researched at Bournemouth Airport include replacement of T8 to T5 fluorescent tubes around the airport costing £15000 and saving 40 Tonnes CO2 per year; LED light installations in toilets costing £11000 and saving 16 tonnes CO2 per year; arrivals hall lighting fittings and control replacement that will save 90 TCO2/annum; various PIR controls and lighting fittings that expect to save 8 TCO2/annum; and apron flood lighting replacement expected to save 37 TCO2/annum.

### **10.30 Training**

- Bournemouth's held the Green Travel to Work Event - part of European mobility week Sept 2010. As part of Bournemouth Airport's commitment to reducing congestion on local roads and improving travel choices for employees and encouraging colleagues and service partners to leave their cars at home.
- Learning lunches were run at Bournemouth Airport in 2008/9. They were presented by members of the Sustainability Steering Group and the Centre for Air Transport and the Environment. These offered all staff the opportunity to learn about aviation and climate change in general, the carbon emissions of their airport and the Group, and the measures being taken to minimise these in order to meet the carbon neutral target.
- A Carbon Management workshop was held at Bournemouth Airport 2009. This workshop was trialled with key members of staff for roll-out to the other airports. It focused on the carbon impacts of the activities taking place in the department of the member of staff involved. The workshop was run by the Centre for Air Transport and the Environment.

**10.31** In support of the staff workshops Bournemouth Airport have fitted highly visible 'Owl' wireless energy monitors at the entrances to the Fire Station, Tower, Admin and Terminal offices to make staff aware of energy costs for their workplace. It is hoped that this initiative will assist staff to make a month- on-month reduction in usage as a contribution to the annual energy-reduction target. The monthly usage and target savings for the following month will be published internally.

## 11. Conditions Monitoring

Paragraphs 11.1 to 11.20 set out the conditions that were attached to the original permission. Many of those conditions were replicated on the permission for the revised Arrivals building and progress in discharging those is reported. Paragraph 11.21 onward relates those conditions that are unique to the revised Arrivals building permission.

### 11.1

*1. The development to which this permission relates must be begun not later than the expiration of three years beginning with the date of this permission.*

#### Action Taken

The permission notice was dated 31<sup>st</sup> August 2007. Development of the Extension to Car Park 1 commenced 10<sup>th</sup> December 2007 and completed early in 2008. As explained in the Introduction of this Report the commencement of the scheme was supposed to have been for a continuous implementation of the whole programme of works, but other previously discussed factors ensured that a substantive commencement of the Terminal works did not take place until October 2008. Even this aspect has been subject to change though with the project being delivered in distinct phases. Discussions with the Local Authority about the implications for compliance with time-limited conditions have continued throughout the delivery of the scheme.

### 11.2

*2. Airport passenger numbers shall be limited to a maximum of 3 million passengers per annum unless otherwise approved by the Local Planning Authority. The Airport shall submit to the Local Planning Authority annual figures for passenger throughput within three months of the end of each calendar year.*

#### Action Taken

Passenger figures are incorporated into this monitoring report and this will continue to be the annual reporting mechanism to comply with this condition.

### 11.3

*3. No development shall take place until samples of all the facing, roofing, glazing and surfacing materials and hard landscaping (including all seating, bollards, litter bins, bus shelters) to be used in the construction of the external surfaces of the development hereby permitted have been submitted to and approved by the Local Planning Authority. Development shall be carried out in accordance with the approved details.*

## Action Taken

A materials swatch was submitted to the Local Planning Authority on 19.09.07 and written confirmation of their acceptability was issued on 19.11.07. A similar swatch was issued in relation to the Arrivals building and confirmed as acceptable by letter on 10.11.10.

### 11.4

*4. Prior to the commencement of development a plan indicating the finished levels AOD of the buildings, extensions and landscape bunds hereby approved shall be submitted and approved by the Local Planning Authority and implemented as per the agreed details.*

## Action Taken

Drawing references 153212/P003 & 004 rev D were submitted to the Local Planning Authority on 29.08.07 and written confirmation of its acceptability was received 20.09.07. The new Arrivals scheme received confirmation of discharge of this condition on 10.11.10.

### 11.5

*5. Notwithstanding the submitted details further details of the proposed landscaping scheme to include planting densities, numbers of plants, location and design of protected fencing both during and after construction to be submitted and agreed with the Local Planning Authority within 6 months of commencement of development together with a landscape management plan including a timetable for implementation and future management. Upon approval of the landscaping details;*

- a) The approved scheme shall be fully implemented with new planting carried out in the planting season October through to March inclusive in accordance with a timetable to be agreed in writing with the Local Planning Authority;*
- b) All planting shall be carried out in accordance with British Standards including regard for plant storage and ground conditions at the time of planting;*
- c) The scheme shall be properly maintained and any plants (including those retained as part of the scheme) which die, are removed or become damaged or diseased within this period shall be replaced in the next planting season with other of similar size and the same species, unless the Local Planning Authority gives written consent to any variation; and,*
- d) The whole scheme shall be subsequently retained.*

## Action Taken

Tree Planting along the Parley Lane bund has taken place this autumn and the remainder of the ground cover planting will be undertaken during the next planting season. Progress with the detail for the landscaped piazza area has been delayed. The scheme will be delivered as part of the new arrivals scheme, but will have to take account of the revised security restrictions. Discussions are on-going with Christchurch BC about the delivery of this element of the scheme.

### 11.6

*6. Prior to the commencement of development of the proposed eastern car park extension or new southern car park, details of the proposed lighting scheme shall be submitted and approved by the Local Planning Authority and shall be implemented in accordance with submitted details and subsequently maintained.*



## Action Taken

Drawing reference 153212/LA/L(90)003 rev E submitted to Local Planning Authority on 20.08.07, showing the details of the lighting columns and the lux levels. Written confirmation of their acceptability received 20.09.07.

### 11.7

*7. Notwithstanding the provisions of the Town and Country Planning (General Permitted Development) Order 1995 or any other order re-voking or re-enacting that Order, nothing over 0.6 metres in height above the level of the adjacent carriageway other than that shown on the approved plans shall be permitted to be placed, built, planted or grown on the land designated as visibility splays on the approved plans.*

## Action Taken

On-going commitment, and condition has been brought to contractor's attention.

### 11.8

*8. No vehicular, pedestrian or emergency access other than that shown on the plans approved pursuant to this permission shall be formed on the site.*

## Action Taken

None proposed

### 11.9

*9. Within 18 months of the commencement of development, all foul water drainage shall be connected to the Holdenhurst Sewerage Works unless otherwise agreed in writing by the Local Planning Authority.*

## Action Taken

Wessex Water identified a preferred route for a new connection and were in the process of commissioning surveys and ground condition investigations. We have since been exploring ways of improving the capacity and efficiency of the on-site treatment works.

### 11.10

*10. Prior to the commencement of development details of the surface water drainage scheme shall be submitted and approved by the Local Planning Authority and implemented as per the agreed details and thereafter retained.*

## Action Taken

Details of the surface water drainage scheme for car park 1a were discussed and agreed with the Environment Agency and signed off as a partial discharge of this condition by Christchurch by Email dated 11/03/08 subject to the schemes for the Terminal and car park 6 being submitted and being acceptable to the Environment Agency. The scheme for the Departures aspect of the scheme has been submitted to Christchurch BC for approval. It is based on the main principles of Sustainable Urban Drainage and is the approach that will also be pursued for the new arrivals facility. Confirmation of final discharge of this condition was received on 10.11.10.

### 11.11

*11. No development shall be brought into use until the signalisation of the junction and other highway improvements to the principal access to the Airport onto Parley Lane has been constructed and brought into fully operational use.*

## Action Taken

Section 278 discussions with Dorset County Council resulted in final scheme sign off in the autumn. The scheme is currently on-site with a programmed for mid-February 2011.

### 11.12

*12. The southern car park as shown on the approved plans shall not be brought into use until the construction and signalisation of the proposed new junction onto Parley Lane is completed and fully operational.*

The timetable for the delivery of the southern car park (car park 6) is behind that for the delivery of the terminal. The Airport set out in its Master Plan that the preferred approach would be to deliver car park 1a, then rationalise the other ad hoc parking arrangements to the north west of the terminal and then deliver car park 6. Car park 1a has been completed and schemes to rationalise and improve the other car parks are being developed.

### 11.13

*13. Prior to the first use of the southern car park hereby approved full details of the shuttle bus to operate between the southern car park and the terminal building shall be submitted to and approved by the Local Planning Authority and implemented as per the agreed details and thereafter retained unless otherwise agreed in writing by the Local Planning Authority.*

## Action Taken

No programme for the delivery of southern car park, see condition 12 above. Once programmed, details of shuttle bus operation can then be discussed.

#### 11.14

*14. Prior to the commencement of development of either the new southern car park or the eastern car park extension details of a parking strategy to include pricing structure and operating times shall be submitted and approved by the Local Planning Authority and implemented as per the agreed details and thereafter retained unless otherwise agreed by the Local Planning Authority.*

#### Action Taken

A Parking Strategy was submitted to the Local Planning Authority on 31.08.07 and written confirmation of its acceptability was received on 19.11.07.

#### 11.15

*15. Prior to the commencement of development details of wheel wash facilities for construction traffic shall be submitted to and approved by the Local Planning Authority and carried out in accordance with the agreed details.*

#### Action Taken

Details of the wheel-wash facilities were submitted to the Local Planning Authority on 13.11.07 and written confirmation of their acceptability received on 19.11.07. As the scheme for the delivery of the arrivals structure progresses we will update the Construction Environment Management Plan (see Condition 17) which incorporates details such as location and type of wheel-wash facilities. Updating of this will form part of the on-going discussions with Christchurch BC and a revised location for a wheel-wash was signed off as part of the conditions discharge letter of 10.11.10.

#### 11.16

*16. Prior to the commencement of any works pursuant to this permission the developer shall submit for the written approval of Christchurch Borough Council:  
A 'desk study' report documenting the history of the site and its surrounding area and likelihood of contaminant extent and type; if the study confirms the possibility of contamination a site investigation report documenting the ground conditions of the site, incorporating a "conceptual model" of all the potential pollutant linkages and an assessment of risk to identified receptors; if risk assessment identifies unacceptable risk(s) a detailed scheme specifying remedial works and measures necessary to avoid risk from contaminants / or gases when the site is developed.  
The Remediation Scheme, as agreed by the Christchurch Borough Council, shall be fully implemented before the development hereby permitted is first occupied. Any variation to the scheme shall be agreed in writing with the Christchurch Borough Council in advance of works being undertaken. On completion of the works the developer shall provide written confirmation that all works were completed in accordance with the agreed details.*

#### Action Taken

A desk study was submitted to the Environment Agency and they confirmed that no further action was required. The Local Planning Authority provided written confirmation that the condition had been discharged on 27.11.07. This was reconfirmed as acceptable in the discharge letter of 10.11.10

### **11.17**

*17. Prior to the commencement of development a Construction Environmental Management Plan (CEMP) shall be submitted to and approved by the Local Planning Authority and implemented in accordance with the agreed details.*

#### Action Taken

A Construction Environment Management Plan was submitted to the Local Planning Authority on 29.08.07 and following alterations written approval confirming acceptability was received on 19.11.07. See Condition 15 re: updating of CEMP.

### **11.18**

*18. Within 6 months of the commencement of development a scheme for water efficiency measures to be employed within the development shall be submitted to and approved by the Local Planning Authority and implemented in accordance with the agreed details and thereafter retained unless otherwise agreed by the Local Planning Authority.*

#### Action Taken

A scheme setting out the water efficiency measures employed in the Departures building has been approved by Christchurch BC. The scheme for Arrivals will be submitted shortly.

### **11.19**

*19. Prior to the commencement of development of the eastern car park extension, a programme of works for the relocation of reptiles shall be submitted to and approved by the Local Planning Authority and implemented in accordance with the agreed details.*

A Reptile Strategy was submitted to the Local Planning Authority on 29.08.07 and written confirmation of its acceptability was received on 20.09.07.

### **11.20**

*20. Prior to the commencement of development of the eastern car park extension, a scheme of tree protection measures both during and after construction shall be submitted to and approved by the Local Planning Authority and implemented in accordance with the agreed details and thereafter retained unless otherwise agreed by the Local Planning Authority.*

## Action Taken

A tree protection scheme was submitted to the Local Planning Authority on 29.08.07 (drawing reference 153212/LA/L(90)006 and written confirmation of its acceptability received on 20.09.07.

## Arrivals Specific Conditions.

### 11.21

*3. Prior to the commencement of development details of the screen wall for the pedestrian walkway shall be submitted to and agreed in writing by the Local Planning Authority. Development shall be carried out in accordance with the approved details and thereafter retained unless otherwise agreed in writing by the Local Planning Authority.*

## Action Taken

Details of the screen wall were submitted on Plan 04\_001G were submitted and written confirmation of their acceptability received on 10.11.10.

### 11.22

*4. Prior to the commencement of development a schedule of sustainability measures to be incorporated into the development shall be submitted to and agreed in writing by the Local Planning Authority. The development shall be carried out in accordance with the agreed details unless otherwise agreed in writing by the Local Planning Authority.*

## Action Taken

Details of the sustainability measures to be employed (set out below) were submitted to the Local Authority and discharged as being acceptable by letter of 10.11.10.

### **Low Carbon Solution**

The design brief was expressly to provide a low carbon solution.

### **Passive Ventilation**

Natural ventilation forms the principle ventilation strategy throughout the building. Certain areas are to be ventilated through a combination of natural and mechanical means. In the transient areas with high occupancies the height of the building encourages a stack effect (warm air rising) to help induce natural ventilation.

Within the Arrivals concourse, immigration hall and baggage reclaim halls ventilation is provided via trickle vents / controlled (via actuators) louvred openings providing cross flow ventilation. The actuator-controlled louvers are to be utilised for pre-cooling the spaces during the night period. The actuators are capable of being manually over-ridden when necessary. Natural ventilation assist fans are to be provided at high level to increase airflow rates within the space. The fans will be speed controlled and will be activated via the automatic control system at pre-determined temperatures.

The internal design temperatures are ultimately dependant on external temperatures. To this end the design is based on historic weather records.

### **Passive Measures and Fabric Insulation**

The building fabric insulation and glazing thermal performances exceed the baseline established in the Building Regulations AD Part L 2006 helping to reduce the operational carbon emissions.

### **Thermal Mass**

The floors and walls are to be constructed from dense materials that increase the thermal mass, ensuring that more stable temperatures can be achieved. The night-cooling strategy flushes the building with outside air when the building is unoccupied; this will leave the internal blocks and slab relatively cool and will slow the over-heating of the building when occupation begins.

#### **Underfloor Heating**

The underfloor heating system is capable of providing both heating and cooling which is derived from the VRF (variable refrigerant flows) heat pump systems. The heating is divided into a number of zones with zone temperature sensors all linked to the Building Management System timer controls which are to correlate the room heating with known occupancy times.

#### **North Facing Roof Lights**

The facility will use more energy in cooling than heating. The introduction of north-facing rooflights ensures natural light without heat gain. With the prevailing winds from the South-West the orientation of the rooflights assists wind-driven natural ventilation.

#### **Solar Shading**

The roof overhangs to the south, east and west elevations reduce solar heat gain in the summer months.

#### **Lighting and Energy Considerations**

The majority of lighting systems direct the light where it is needed at customer level. In addition the lighting reacts to external lighting levels using photo-dimming controls.

#### **Photovoltaics**

Photovoltaic panels are to be mounted at roof level at an optimum pitch. All will be sub-metered to take account the energy specifically generated from the PV system. The pulsed output to the BMS will allow monitoring and date logging by the facilities management staff. The size and numbers of photovoltaic panels have been determined by carbon output calculations based on a yearly throughput of 3m passengers.

#### **Energy Efficiency and Renewables**

All plant and equipment provided will be energy efficient.

#### **Offices**

Heating and cooling will be provided via a combination of air cooling VRF and heat pump systems. The system will be capable of simultaneously heating and cooling to the office accommodation, security check booths, interview rooms, watch rooms and customs channel. The system is to be capable of heat recovery depositing waste into the LTHW system.

#### **Building Management System**

A digital automatic BMS system will be provided to monitor and control all mechanical systems.

### **11.23**

*Following the first use of the development (the arrivals terminal) for passenger processing the existing arrivals facilities shall no longer be used for passenger throughput of processing.*

#### **Action Taken**

The future of the existing arrivals facility forms an integral part of the consideration of the space between the two buildings, which is on-going, but its use for passenger processing will cease upon the opening of the new arrivals terminal.