



# Newcastle International Airport Noise Action Plan

November 2013

  
**Newcastle International**  
Your Airport

[www.newcastleinternational.co.uk](http://www.newcastleinternational.co.uk)

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## 1.0 Foreword by Newcastle International Airport CEO

Newcastle International Airport continues to play a vital role in the North East region, handling approximately 4.4 million passengers in 2012. The airport boasts a choice of over 80 destinations worldwide, including a daily service to Dubai from Newcastle, which started in September 2007. Following the success of this service Emirates introduced a Boeing 777 aircraft onto the route in 2012.

As well as offering exciting destinations, the airport contributes significantly to the economy, providing over 3,200 jobs on site and many more across the region. These and other benefits account for the airport's contribution of over £640 million to the regional economy each year.

While maintaining the goal to be the most welcoming airport in the UK, we also strive to be a good neighbour and manage environmental impacts on the local communities. We have a dedicated member of staff to deal with environmental issues and this has resulted in a number of local environmental initiatives, including noise management. During 2012 significant investment has been made in a new Noise and Track Keeping system. The system will enhance the noise management service provided to the local communities.

We welcome the opportunity to review this Noise Action Plan, to demonstrate continual improvement in protecting the surrounding communities.

If you have any comments on the Action Plan, please direct your views to:

Environmental Adviser  
Planning and Corporate Affairs  
Newcastle International Airport  
Woolsington  
Newcastle upon Tyne  
NE13 8BZ

[noise@newcastleinternational.co.uk](mailto:noise@newcastleinternational.co.uk)

**DAVID LAWS, CEO**

## 2.0 Executive Summary

This document has been produced to update the Newcastle International Airport Limited (NIAL) noise management programme for the period 2013 – 2018. The purpose of this document is to review and update the actions identified within the first Noise Action Plan.

### 2.1 Airport Masterplan

NIAL have produced a draft Airport Masterplan which forecasts development up to 2030.

The key forecasts within the period are that passenger numbers will grow from 4.4 million in 2012 to up to 8.5 million by 2030. Aircraft movements will grow from 62,200 in 2012 to up to 87,500 by 2030.

The Masterplan sets out a number of development targets for 2021 and 2030. These targets recognise the importance of ensuring that growth occurs while maintaining a balance between the benefits of aviation and its environmental costs. The plan demonstrates that the noise impact in 2030 will not exceed 1993 levels.

### 2.2 Summary of Newcastle International Airport

NIAL maintains its position as the main airport serving the North East of England with a population of over 3 million people. As such NIAL is the Competent Authority to produce this Action Plan. The airport is run as a Public Private Partnership between seven local authorities in the North East region and AMP Capital.

### 2.3 Current Noise Climate

During 2013 NIAL replaced the Noise and Track keeping system and invested in a new system which has significantly greater capabilities for monitoring noise levels and track compliance.

Noise complaints are received through a number of different methods. Each complaint is investigated using the Airport's noise and track keeping system and liaising with Air Traffic Services. If this does not resolve the issue, further action is taken.

A summary of noise complaints is presented at the quarterly Airline Technical Committee and Airport Consultative Committee.

Members of Air Traffic Services (ATS) at NIAL have contributed to the Noise Action Plan and have taken ownership to deliver some of the actions. ATS fully support the Noise Action Plan and they are continually looking at ways to improve the efficiency of aircraft operations.

As part of the Aeronautical Information Publication (AIP), ATS have in place well-established noise abatement procedures. Integral to the procedures is a requirement that *'every operator of aircraft using the aerodrome shall ensure at all times that aircraft are operated in a manner calculated to cause the least disturbance in areas surrounding the aerodrome'*.

NIAL operates a series of Preferred Departure Routes which are well established and have resulted in a reduction in noise complaints within the local communities. The noise abatement procedures are reviewed on a regular basis.

## 2.4 Legislative Requirements

Key International and National legislative requirements considered in this Noise Action Plan;

- *Environmental Noise (England) Regulations 2006 Environmental Noise Directive 2002/49/EC*
- *Balanced Approach to Noise Management - ICAO*
- 'The future of Air Transport' White Paper

On a local scale, NIAL works closely with Environmental Health Officers to manage any local issues. The Local Authority also has a number of mechanisms to encourage a reduction in noise impacts.

## 2.5 Noise Mapping results

The noise mapping in this document represents the annual average values as required under the directive. Contours for 2011 were produced, providing a picture of the noise impact for that year.

The highest contour level to include dwellings was >60dB(A).

The maps generated by DEFRA to include agglomerations demonstrate that NIAL activities do not have an impact on areas with a population in excess of 250,000 persons. The local communities surrounding NIAL are predominantly small villages and rural areas; however, as neighbours these areas are important to the Airport.

## 2.6 Consultation process

The revision of this Action Plan was drafted with the assistance of Newcastle International Airport Consultative Committee and a small focus group with representatives from local groups. Members of these groups have been consulted directly on this revised plan and comments have been welcomed.

The current Noise Action Plan is available on the NIAL website.

## 2.7 Noise Action Plan

The Actions set out in this plan aim to support and enhance existing noise abatement procedures and have been separated into seven key areas;

- **Air Traffic Management**  
Aim to introduce best practice environmental procedures, to reduce the noise impact of aircraft operations.
- **Noise policy**  
Review and update the noise policy to demonstrate commitment to noise issues.

- **Community issues**  
Engage with the local communities to understand their concerns and communicate airport achievements.
- **Noise exposure levels**  
Continue to measure noise levels within the communities.
- **Communication**  
Improve the communication of noise management, through the internet and additions to community news letters.
- **Airfield management**  
In any new airfield developments, consider the use of new technology to reduce noise levels on the ground.
- **National Policy**  
Continue to support the Sustainable Aviation Strategy and encourage a joint approach to environmental management.

## 3.0 Introduction

This document has been produced to update the Newcastle International Airport Limited (NIAL) noise management programme for the period 2013 – 2018. The purpose of this document is to review and update the actions identified within the first Noise Action Plan.

While this review has been requested by DEFRA, it should be highlighted that the Action Plan is annually reassessed, through the Airport Consultative Committee.

The Action Plan has been separated into seven key areas;

- Air Traffic Management
- Noise policy
- Community issues
- Noise exposure levels
- Communication
- Airfield management
- National Policy

A full breakdown of actions is detailed in section 9 of this document.

## 4.0 Airport Masterplan

Since the production of the last Noise Action Plan, NIAL have produced a draft Airport Masterplan which forecasts development up to 2030.

The key forecasts within the period are that passenger numbers will grow from 4.4 million in 2012 to up to 8.5 million by 2030. Aircraft movements will grow from 62,200 in 2012 to up to 87,500 by 2030.

A number of development targets have been made within the plan and they include the following;

By 2021:

- The car parks – realignment of existing internal roadways to increase capacity and circulation as well as some additional long stay car parking;
- The apron – to accommodate additional aircraft parking;
- Construction of offices and warehouses at the Southside Development.

By 2030:

- Runway and taxiway performance improvements;
- Extensions to the terminal and possible pier and/or satellite pier development;
- Additional long stay car parks along with a possible multi-storey short stay car park to the front of the terminal;
- Further apron development to accommodate additional aircraft parking;
- Completion of the Southside Development;
- Road junction and infrastructure improvements.

The plan recognises the importance of ensuring that growth occurs while maintaining a balance between the benefits of aviation and its environmental costs. A revised set of noise contours were produced to support the plan and they demonstrated that the noise impact in 2030 will not exceed 1993 levels.



## 5.0 Summary of Newcastle International Airport

Newcastle International Airport Limited (NIAL) maintains its position as the main airport serving the North East of England with a population of over 3 million people. As such NIAL is the Competent Authority to produce this Action Plan. The airport is run as a Public Private Partnership between seven local authorities in the North East region and AMP Capital who each have a 51% and 49% shareholding respectively of the company.

Newcastle, like all regional airports, has been affected by the economic downturn and the continuing uncertainty in the market place. This and other factors such as increases in Air Passenger Duty, the Government tax on passengers travelling by air, caused passenger numbers to fall to 4.4 million in 2008, a 25% decrease in passenger numbers since the airport's peak of 5.7 million passengers in 2007.

Since 2010 passenger numbers have remained largely static, with slight growth occurring in the latter part of 2012 and continuing into early 2013. Looking forward, we anticipate seeing a steady growth in passenger numbers up to 6.1 million in 2021 and up to 8.5 million passengers in 2030.

Budget airlines (easyJet, Ryanair and Jet2) are well established at the airport, and routes have grown to meet the continuing demand – with further expansion expected after we emerge from the recession. Following the successful implementation of a daily Dubai service by Emirates in 2007, NIAL welcomed the replacement of an A330 to a Boeing 777 on this route.

As well as commercial operations, NIAL is designated as a 'Co-opted Military emergency airfield' and as such are required to accept aircraft requiring assistance. Military aircraft also use the airport for 'practice diversions' to develop pilot familiarisation.

However, as with all UK airports, in recent years there has been a decline in passenger growth due to the current economic climate.

### 5.1 Annual Movements

As described above the growth at NIAL is demonstrated in the movements table below;

#### 5.1.1 Annual Movements 2000-2011

Year	Commercial	Others*	Total
2000	42,380	40,455	82,938
2001	45,010	37,377	82,456
2002	43,882	34,838	78,884
2003	42,116	32,991	75,209
2004	48,717	26,962	75,763
2005	58,868	25,232	84,100
2006	57,477	24,082	81,559
2007	57,626	21,812	79,438

2008	53,605	20,160	73,765
2009	48,439	22,271	70,710
2010	46,110	21,864	67,974
2011	44,008	21,709	65,717

**NB: The 'others\*' column includes Flying Club, Test and Training aircraft including military**

The Environmental Noise Directive (END) applies to airports with excess of 50,000 movements (take-off or a landing) in 2006, and those that affect the first round agglomeration, in England 18 airports have been identified to comply with the Directive. NIAL is one of these airports.

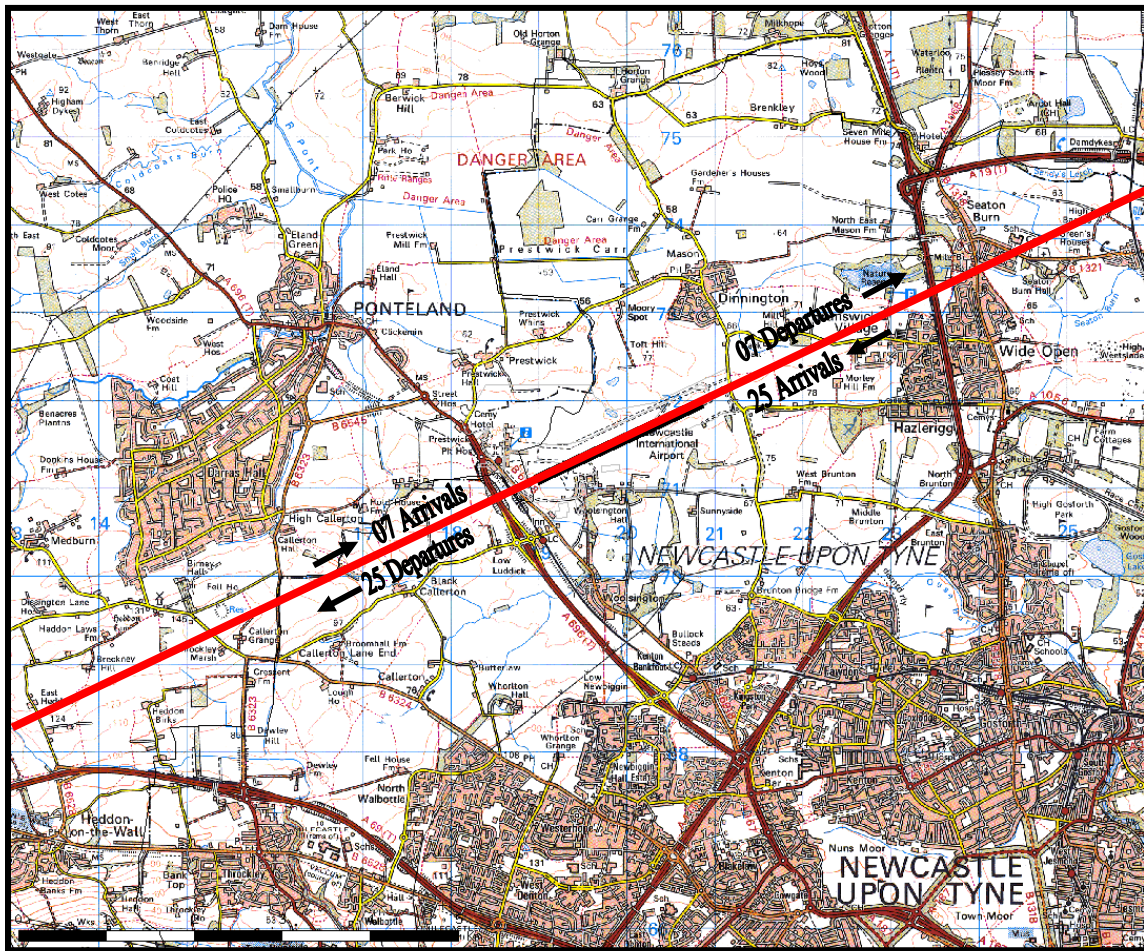
## **5.2 Location**

NIAL is situated approximately six miles North West of Newcastle City centre. The airport is situated on the edge of the Tyne and Wear conurbation, which includes Newcastle upon Tyne, Sunderland and Gateshead. Approximately one million people live within this area.

## **5.3 Runway Usage**

NIAL operate from one runway aligned south-west to north-east. The runway can be used in either direction and is designated 25 or 07 depending wind direction. Runway 25 is the predominant runway of use with approximately 70% of operations.

## Plan 1: Runway alignment



### 5.4 Airport site

The area of land already developed at Newcastle International Airport covers 184 hectares. NIAL owns all of the land within this area, which includes all of the main activities of the airport, including the terminal, apron, runway, car parks, freight, maintenance and other ancillary facilities. The runway lies in an approximate south west to north east alignment, with the terminal areas located to the north of the runway at the western end.

This area specifically includes:

- The terminal building and pier, and includes the usual range of check-in facilities, lounges, retail and food outlets, baggage reclaim and supporting offices, stores and plant rooms.
- The main passenger and commercial apron area, including aircraft parking stands and equipment storage areas.
- All short and long-term car parks, including the administration building. Approximately 7,000 spaces are provided in total, with courtesy bus provision.
- The air traffic control building, including visual control room (VCR) and a series of small aircraft engineering units.

- The Tyne and Wear Metro (light rail) station and a number of bus stops.
- Petrol filling station
- Three hotels are also located close to the entrance of the airport
- To the south of the runway are aircraft engineering and maintenance facilities, including hangars and offices.

## 6.0 Current Noise Climate

### 6.1 Noise Monitoring

During 2013 NIAL invested in a new Noise and Track keeping system, which continuously measures noise levels within the local communities. Bruel and Kjaer were appointed to install the 'Noise Desk' system, which provides greater capabilities for monitoring noise levels and track compliance. Brand new noise monitors have been installed at the following locations;

- Dinnington First School
- Ponteland Middle School
- Woosington (Middle Drive)
- Seaton Burn Community College
- Heddon on the Wall library

An added benefit of the new system is that access is gained via a web browser. This will enable members of the team to visit local communities and provide system demonstrations. Airlines will continue to be provided with regular updates on track compliance.

### 6.2 Noise complaints

Noise complaints are received through a number of different methods, including a dedicated email address ([noise@newcastleinternational.co.uk](mailto:noise@newcastleinternational.co.uk)), telephone line 0191 214 3569 and directed to the Environmental Adviser. Each complaint is investigated using the Airports noise and track keeping system and liaising with Air Traffic Services.

If the complaint can not be resolved through correspondence, the complainant is invited to the airport to discuss their concerns with airport management. Also, as part of the airport Noise and Track keeping system, a mobile noise monitor can be located within individual properties, to monitor noise levels.

A summary of noise complaints is presented at the quarterly Airline Technical Committee and Airport Consultative Committee. The table below details complaints received from 2004 to date, this information is provided at the above meetings.

#### 6.2.3 Noise complaints summary

Year	Number of complaints
2005	91
2006	88
2007	97
2008	88
2009	84
2010	46
2011	27
2012	46

As requested by the Airport Consultative Committee, repeat complaints (i.e. multiple complaints, over a number of days) are classed as one complaint.

### **6.3 Air Traffic Management Role**

At Newcastle, Air Traffic Services (ATS) are managed by NIAL. This enables a close working relationship between ATS and the Planning and Corporate Affairs Department. Members of ATS contributed to the Noise Action Plan and have taken ownership to deliver some of the actions.

The following three actions provide a brief example of the input from ATS.

- PRNAV trial – the introduction of Precision Navigation will increase the accuracy of routings and also reduce the workload for both pilot and Air Traffic Controller;
- Continuous Descent Approaches (CDAs) – This procedure involves the aircraft coming in to land at a more constant speed and rate of descent, rather than making a series of stepped descents. As a result both noise and air emissions are reduced for aircraft following a CDA;
- Operational efficiency of P18 – P18 is the airspace linking Manchester Airport and Newcastle Airport. On occasion constraints imposed by NATS result in aircraft being unable to carry out CDAs. ATS are working on the most efficient spacing and routing of aircraft through this airspace.

ATS fully support the Noise Action Plan and they are continually looking at ways to improve the efficiency of aircraft operations.

### **6.4 Noise Abatement Procedures**

As part of the Aeronautical Information Publication (AIP), ATS have in place well-established noise abatement procedures. Integral to the procedures is a requirement that *'every operator of aircraft using the aerodrome shall ensure at all times that aircraft are operated in a manner calculated to cause the least disturbance in areas surrounding the aerodrome'*.

See below examples of the Noise abatement procedures;

- Continuous Descent Approaches – aircraft to use low power, low drag approach techniques at all times
- Visual approach requirements – aircraft must not join the final approach at a range of less than 7nm (nautical miles) or below 2300ft QFE (pressure local to the airport)
- Ground running – this is prohibited between 2300 and 0600 (winter), 2200 and 0500 (summer).
- General Aviation – such aircraft must avoid overflying built up areas and training circuits are variable to reduce the impact on one area.

The noise abatement procedures are reviewed on a regular basis, by both the Environmental Adviser and ATS.

## 6.5 Aircraft Routeing

Following an extensive consultation as part of the Newcastle Airspace Change Proposal in 2004, NIAL operate a series of Preferred Departure Routes (PDR's). The routes are well established and have resulted in a reduction in noise complaints, within the local communities. Please see a plan of the departure routes in Appendix C.

As a result of the PRNAV trial a consultation will commence in November 2013 to implement Standard Instrument departure routes (SIDS) and Omni-directional departure routes. The improved accuracy of routes will provide known environments for aircraft activities.

## **7.0 Legislative Requirements**

### **7.1 European Regulation**

#### ***Environmental Noise (England) Regulations 2006 Environmental Noise Directive 2002/49/EC***

This Noise Action Plan has been produced to comply with the Environmental Noise (England) Regulations 2006 (as amended). These regulations transpose the Environmental Noise Directive 2002/49/EC.

The aim of the END is to define a common approach across the European Union with the intention of avoiding, preventing or reducing on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise.

### **7.2 International Regulation**

#### ***Balanced Approach to Noise Management - ICAO***

In 2001 the International Civil Aviation Organisation (ICAO) endorsed the 'Balanced Approach', subsequently re-affirmed in 2007. This approach states that noise problems at an airport should be analysed using the following four elements;

- Reduction at source
- Land use planning and management
- Noise abatement operational procedures; and
- Aircraft operating procedures

The principles of this approach are to manage local noise problems in the most cost effective manner, to meet local requirements. At Newcastle Airport all four elements above are applied, through the use of modern aircraft, working with Local Authorities on land use planning and strict noise abatement procedures.

### **7.3 National Regulation**

In December 2003 the UK Government produced 'The future of Air Transport', this White Paper sets out a strategic framework for the development of airport capacity to 2030. The document states the Governments position on air travel and recognises the balance, between people's desire to travel and the need to minimise impacts on local communities.

Included in the paper are measures which combine to limit and reduce the number of people affected by noise.

To demonstrate limiting noise levels, there is an expectation for all airport operators to offer households subject to high levels of noise (69dBA Leq or more) assistance with the costs of relocating. Acoustic insulation must be offered to noise sensitive buildings such as schools, hospitals and residential properties exposed to 63dBA Leq or more. In the



immediate conurbation to Newcastle International Airport, there are no dwellings or sensitive buildings in these noise exposure levels, therefore NIAL do not provide any compensation schemes.

In order to put noise exposure into context, the Government has used 57 dBA<sub>Leq</sub> as the level of daytime noise marking the onset of significant community annoyance. However, it is recognised that levels of noise are subjective and vary between individuals.

In March 2013 the UK Government published its Aviation Policy Framework (APF). This sets out a long term strategy to enable the UK aviation sector to flourish and support economic growth, at the same time as addressing issues such as aircraft noise and carbon emissions.

The Framework sets out the government's high level objectives for the sector and updates the 2003 Air Transport White Paper.

## **7.4 Local regulations**

While Local Authorities deal with noise issues defined under the Environmental Protection Act as 'nuisance', they do not have any direct powers relating to aircraft noise. As an airport operator NIAL work closely with local Environmental Health Officers to manage any local issues.

However the Local Authority (LA) does have a number of mechanisms to encourage a reduction in noise impacts. While no longer an approved guidance note, Planning Policy Guidance Note 24 (Planning and Noise) provides a good evidence base to ensure that inappropriate development is discouraged or prohibited around airports. Also as part of the planning process, the LA can enforce Section 106 legal agreements with any planning approval granted. An example of this can be seen when Newcastle City Council and Castle Morpeth Borough Council instigated a Section 106 agreement, to install a noise and track keeping system as part of the terminal extension planning application.

At this time there are no limits in place at the airport in terms of aircraft movements. The airport operates on a 24hr basis with approximately 12% of operations during the night time hours.

## 8.0 Noise Mapping results

### 8.1 Noise Mapping

The noise mapping required under the directive represents the annual average values, therefore the maps in Appendix A represent the modelled average for 2011. This contrasts with the current UK practice of producing aircraft noise contours for the average summer's period (16 hour, 07.00 -23.00, Leq). END requires the use of different parameters  $L_{day}$ ,  $L_{evening}$ ,  $L_{Aeq,16hr}$ ,  $L_{night}$  and  $L_{den}$ .

For information purposes only, see below a breakdown of the total number of commercial aircraft movements for Tuesday 23<sup>rd</sup> August 2011.

#### 8.1.1 Breakdown of aircraft movements

	Departures	Arrivals
Lday (07.00 – 19.00)	73	76
Levening (19.00 – 23.00)	7	23
Lnight (23.00 – 07.00)	11	13
Leq16hr (07.00 – 23.00)	80	99
Lden (00.00 – 24.00)	91	112

\*NB Two Royal Mail flights operate each night. General aviation and helicopter activity has not been included in the figures above.

It is worth highlighting that out of the 11 departures between 23:00 – 07:00, 8 of those were between 06:00 – 07:00. As a regional airport, it is critical to provide key destinations during these hours, including London Heathrow, Gatwick and Paris.

### 8.2 Summary of results

Environmental Research and Consultancy Department (ERCD) were instructed to produce Noise maps using the metrics detailed in END. Contours for 2011 were generated for  $L_{day}$ ,  $L_{evening}$ ,  $L_{Aeq,16hr}$ ,  $L_{night}$ ,  $L_{den}$  and from 55 to 75 dB(A). The noise mapping process provides a snap shot of the noise impact for the year 2011.

The highest contour level to include dwellings was >60dB(A), the table below details the number of dwellings within the >60dB(A) contour level.

### 8.2.1 Dwellings contained within the >60dB(A)

Contour	Dwellings
L <sub>day</sub>	<50
L <sub>evening</sub>	0
L <sub>den</sub>	400
L <sub>Aeq,16hr</sub>	<50
L <sub>night</sub>	0

The following tables provide further detail on the individual metrics;

### 8.2.2 Estimated total number of people, dwellings and area above various noise levels, L<sub>den</sub>

Noise Level (dB)	Number of dwellings	Number of People	Area (km <sup>2</sup> )
≥ 55	2,000	4,100	16.1
≥ 60	400	800	6.2
≥ 65	0	0	2.3
≥ 70	0	0	0.8
≥ 75	0	0	0.4

### 8.2.3 Estimated total number of people, dwellings and area above various noise levels, L<sub>day</sub>

Noise Level (dB)	Number of dwellings	Number of People	Area (km <sup>2</sup> )
≥ 54	1,400	2,800	12.7
≥ 57	300	600	7.2
≥ 60	< 50	<100	4.0
≥ 63	0	0	2.2
≥ 66	0	0	1.3
≥ 69	0	0	0.7

### 8.2.4 Estimated total number of people, dwellings and area above various noise levels, L<sub>evening</sub>

Noise Level (dB)	Number of dwellings	Number of People	Area (km <sup>2</sup> )
≥ 54	1,200	2,400	8.1
≥ 57	250	500	4.3
≥ 60	0	0	2.2
≥ 63	0	0	1.2

**8.2.5 Estimated total number of people, dwellings and area above various noise levels,  $L_{Aeq16h}$**

Noise Level (dB)	Number of dwellings	Number of People	Area (km <sup>2</sup> )
≥ 54	1,350	2,700	11.7
≥ 57	250	500	6.5
≥ 60	< 50	< 100	3.6
≥ 63	0	0	2.0

**8.2.6 Estimated total number of people, dwellings and area above various noise levels,  $L_{night}$**

Noise Level (dB)	Number of dwellings	Number of People	Area (km <sup>2</sup> )
≥ 48	1,550	3,100	13.0
≥ 51	700	1,400	7.4
≥ 54	< 50	< 100	4.1
≥ 57	0	0	2.3

The maps generated by DEFRA to include agglomerations, demonstrate that NIAL activities do not have an impact on the First Round Agglomerations. It is noted that First Round Agglomerations are areas with a population in excess of 250,000 persons. The local communities surrounding NIAL are predominantly small villages and rural areas, however as neighbours these areas are important to the Airport.

## **9.0 Consultation process**

In line with the guidance, Newcastle International Airport Consultative Committee has been involved in the revision of this Action Plan. The original plan was drafted with the assistance of a small focus group with representatives from the following local groups;

- Hazlerigg Parish Council
- Heddon on the Wall Parish Council
- Darras Hall Estates Committee

Members of the above groups have been consulted directly on this revised plan and comments have been welcomed. No material comments were received from the consultation process. The current Noise Action Plan is available on the NIAL website.

## 10.0 Noise action plan

### 10.1 Air Traffic Management

ACTION	IMPACT	TIMESCALE	PERFORMANCE INDICATOR	UPDATE OF ACTION	STATUS
Commence a PRNAV (precision navigation) trial for departure routes. This will improve the accuracy of departure routes.	Departures	2012	Compliance with the departure routes.  Number of people affected: 1900	A PRNAV trial has taken place with easyJet and Emirates in 2012/2013 and the results obtained have been used to support a departure route consultation.	Complete
Assess the effectiveness of all departure routes as part of the PRNAV trial.	Departures	2013	Compliance with the departure routes and number of noise complaints.  Establish baseline data on commencement of routes and improvement targets	Following the above trial the decision has been made to formalize the departure routes in the form of SIDS and OMNI departure routes.	Complete
Monitor 90% of aircraft carrying out Continuous Descent Approaches (CDAs). The use of CDAs reduces both noise and air emissions.	Arrivals	2014	Information to be presented to the Airline Technical Committee (ATC).  Number of people affected 3900.	The implementation of a new Noise and Track keeping system will provide the ability to monitor CDAs.	On going

<b>ACTION</b>	<b>IMPACT</b>	<b>TIMESCALE</b>	<b>PERFORMANCE INDICATOR</b>	<b>UPDATE OF ACTION</b>	<b>STATUS</b>
Continue dialogue with Manchester NATS on the operation and efficiency of P18.	Arrivals & Departures	On going	Update of actions to the Airline Technical Committee (ATC).	On going	On going
Continue dialogue with Durham Tees Valley (DTV) Airport to improve the routing of aircraft in the vicinity of DTV Airport.	Arrivals	On going	Update of actions to the Airline Technical Committee (ATC)	On going	On going
Revise visual approach requirements. This will involve an increase in the distance and height at which aircraft can join final approach.	Arrivals	2009	Reduction in noise complaints for arriving aircraft.	New action following initial consultation.	Complete
Establish a policy on training flights, to include restriction on the type of aircraft, timings and alternate routings.	Departure Arrivals	2012	Publish policy to airline operators.	New action following initial consultation. Specific arrangements have been made with individual operators.	Complete
Review General Aviation noise abatement procedures, to include holding patterns and training circuits.	Departure Arrivals	2014	Publish updated procedures.	New action following initial consultation.	On going
Produce guidance on helicopter activities.	Departure Arrivals	2012	Publish guidance and monitor complaints. Include amendments in AIP.	New action following initial consultation. Specific arrangements have been made with the based helicopter operator and they have revised their procedures.	Complete

## 10.2 Noise policy

ACTION	IMPACT	TIMESCALE	PERFORMANCE INDICATOR	UPDATE OF ACTION	STATUS
Review the current noise policy and re-issue.	Community trust	2015	Publish NIAL Noise Policy.	New action following initial consultation.	On going.

## 10.3 Community issues

ACTION	IMPACT	TIMESCALE	PERFORMANCE INDICATOR	UPDATE OF ACTION	STATUS
Engage with local schools to encourage the use of noise monitoring data within their studies.	Education	2013 - 2018	Visits to local schools.	New action following initial consultation.  The introduction of the new NTK will allow greater opportunities for community engagement.	On going.
Provide updates on the Noise Action Plan to local Parish Councils.	Community Trust	On going	Attendance at Parish Council meetings.	New action following initial consultation.  Parish Councils and the local communities have been provided with updates as part of the Masterplan consultation.	On going



#### 10.4 Noise exposure levels

ACTION	IMPACT	TIMESCALE	PERFORMANCE INDICATOR	UPDATE OF ACTION	STATUS
Investigate a new noise monitoring location to the west of the airfield.	Community trust	2013	Install noise monitor.	A new noise monitor has been installed.	Complete
Continue to operate the Noise and Track keeping system. Use the monitors to manage the impacts of noise.	Community trust and monitoring information.	On going	Production of monthly reports.	The NTK has been replaced by the 'Noise desk' system from B&K.	Complete

#### 10.5 Communication

ACTION	IMPACT	TIMESCALE	PERFORMANCE INDICATOR	UPDATE OF ACTION	STATUS
Continue to communicate noise and environmental issues through the Airline Technical Committee.	Awareness	Quarterly	Production of minutes.	The Committee is fully engaged on environmental issues and they are regularly provided with track compliance information.	On going
Report noise complaints to the Airport Consultative Committee.	Community Trust	Quarterly	Production of minutes and précis of minutes on the NIAL website.  Number of complaints received.	The Consultative Committee have recently received an environmental presentation and regularly have updates.	On going
Include track keeping information on the internet.	Community and Airline	2014 - 2016	Dedicated section on the NIAL	New action following initial consultation.	On going

	feedback		website to track keeping.	The new NTK will provide greater accuracy and information to be loaded onto the NIA website.	
Continue to provide a dedicated noise monitoring telephone line and email address.	Community Trust	On going	Number of registered complaints.	On going	On going
Increase community engagement through NTK demonstrations at local schools and Parish Council meetings.	Community Trust	2013 - 2016	Number of demonstrations.	The new system has just been approved for use.	New action

## 10.6 Airfield management

ACTION	IMPACT	TIMESCALE	PERFORMANCE INDICATOR	UPDATE OF ACTION	STATUS
Consider the installation of Fixed Electrical Ground Power (FEGP) on future stand development.	Ground noise	On going	Reduction in ground noise.  Number of people affected <100.	On going	On going
Continue to apply ground engine testing restrictions (i.e. only when overriding operational requirements exist).	Ground noise	On going	Reduction in ground noise.  Number of people affected 1800.	On going	On going

## 10.7 National Policy

ACTION	IMPACT	TIMESCALE	PERFORMANCE INDICATOR	UPDATE OF ACTION	STATUS
Support the Sustainable Aviation Strategy as a signatory.	Ground noise	On going	Contribution to the Annual report on performance against key indicators.	On going	On going

## Glossary of Terms

Agglomeration	Major Continuous Urban Area as set out within the Regulations
Airline Technical Committee	Representatives from NIAL and based airlines (easyJet/Jet2/Thomas Cook and Thomson) meet on a quarterly basis.
Aeronautical Information Publication (AIP)	Publication which is updated every 28 days, containing information essential to air navigation.
Airport Consultative Committee	Community focussed group, with representatives from the local Parish Councils, Local Authorities and key organisations.
ATC	Air Traffic Control
CAA	Civil Aviation Authority
CDA	Continuous Descent Approach
dB	Decibel
DEFRA	Department for Environment Food and Rural Affairs
DfT	Department for Transport
END	Environmental Noise Directive (2002/49/EC)
ERCD	Environmental Research and Consultancy Department
FEGP	Fixed Electrical Ground Power
First Round Agglomeration	An agglomeration but having a population in excess of 250,000 persons
NIAL	Newcastle International Airport Limited
$L_{Aeq,T}$	The A-weighted equivalent continuous sound pressure level which is a notional continuous level that, at a given position and over the defined time period, T, contains the same sound energy as the actual fluctuating sound that occurred at the given position over the same period, T.
$L_{Aeq,16hr}$	The $L_{Aeq,16hr}$ over the period 0700 – 2300, local time (for strategic noise mapping this is an annual average)
$L_{day}$	The $L_{day}$ over the period 0700 – 1900, local time (for strategic noise mapping this is an annual average)
$L_{den}$	The day, evening and night level is a logarithmic composite of the $L_{day}$ , $L_{evening}$ , $L_{night}$ levels but with 5 dB(A) weighting

	added to the $L_{\text{evening}}$ value and 10 dB(A) added to the $L_{\text{night}}$ value.
$L_{\text{evening}}$ ,	The $L_{\text{evening}}$ over the period 1900 – 2300, local time (for strategic noise mapping this is an annual average)
$L_{\text{night}}$	The $L_{\text{night}}$ over the period 2300 - 0700, local time (for strategic noise mapping this is an annual average)
P18	Controlled airspace between Newcastle International Airport and Manchester Airport,
PRNAV	Precision navigation
SID	Standard Instrument Departure route

## APPENDIX A NOISE MAPS



Department  
for Environment  
Food & Rural Affairs

The Environmental Noise  
(England) Regulations 2006  
(as amended)

Newcastle Airport (EGNT)

$L_{den}$

Year - 2011

60 Noise Level Contour (dB)

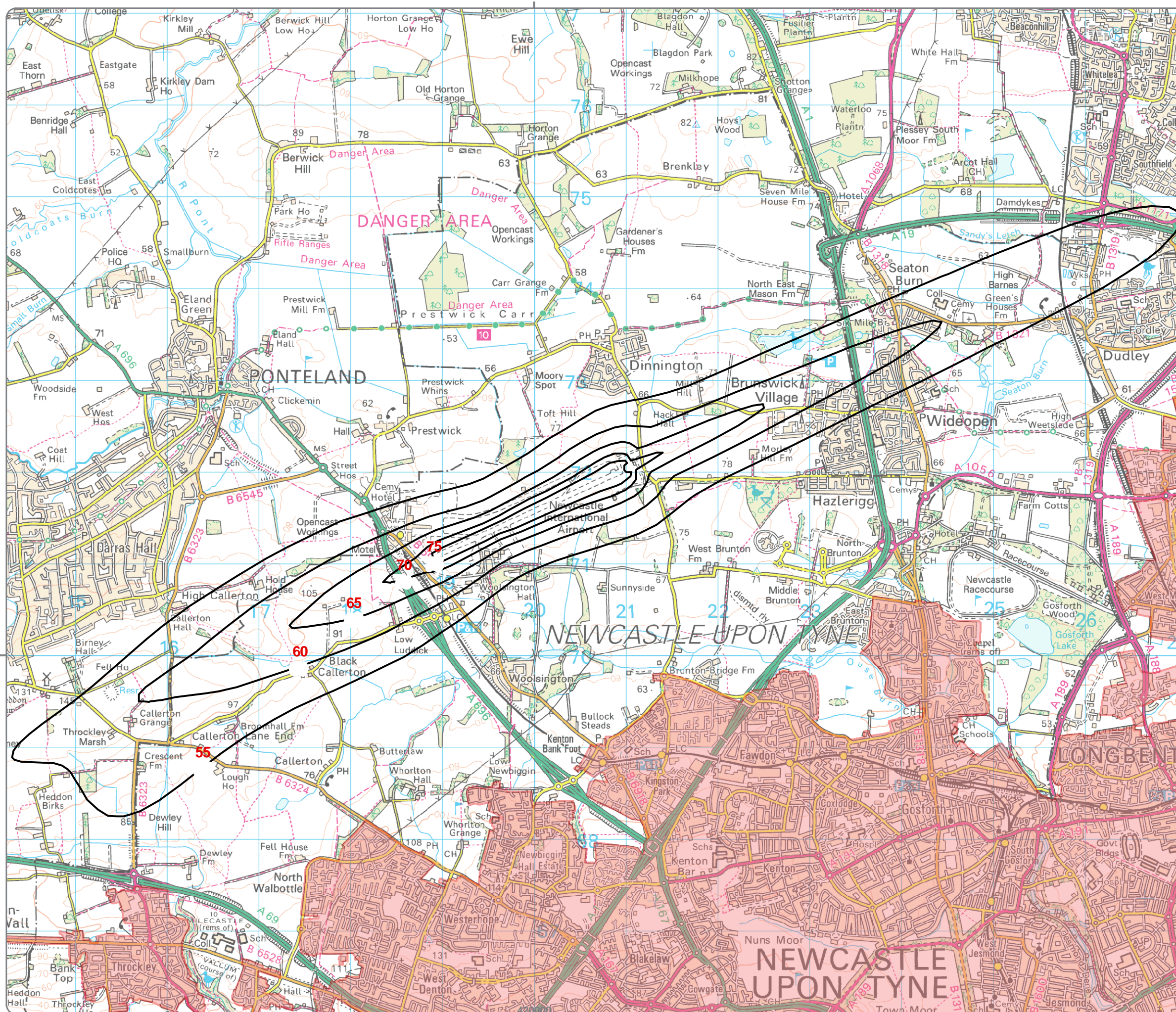
Agglomeration



Produced on behalf  
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Department  
for Environment  
Food & Rural Affairs

The Environmental Noise  
(England) Regulations 2006  
(as amended)

Newcastle Airport (EGNT)

$L_{day}$

Year - 2011

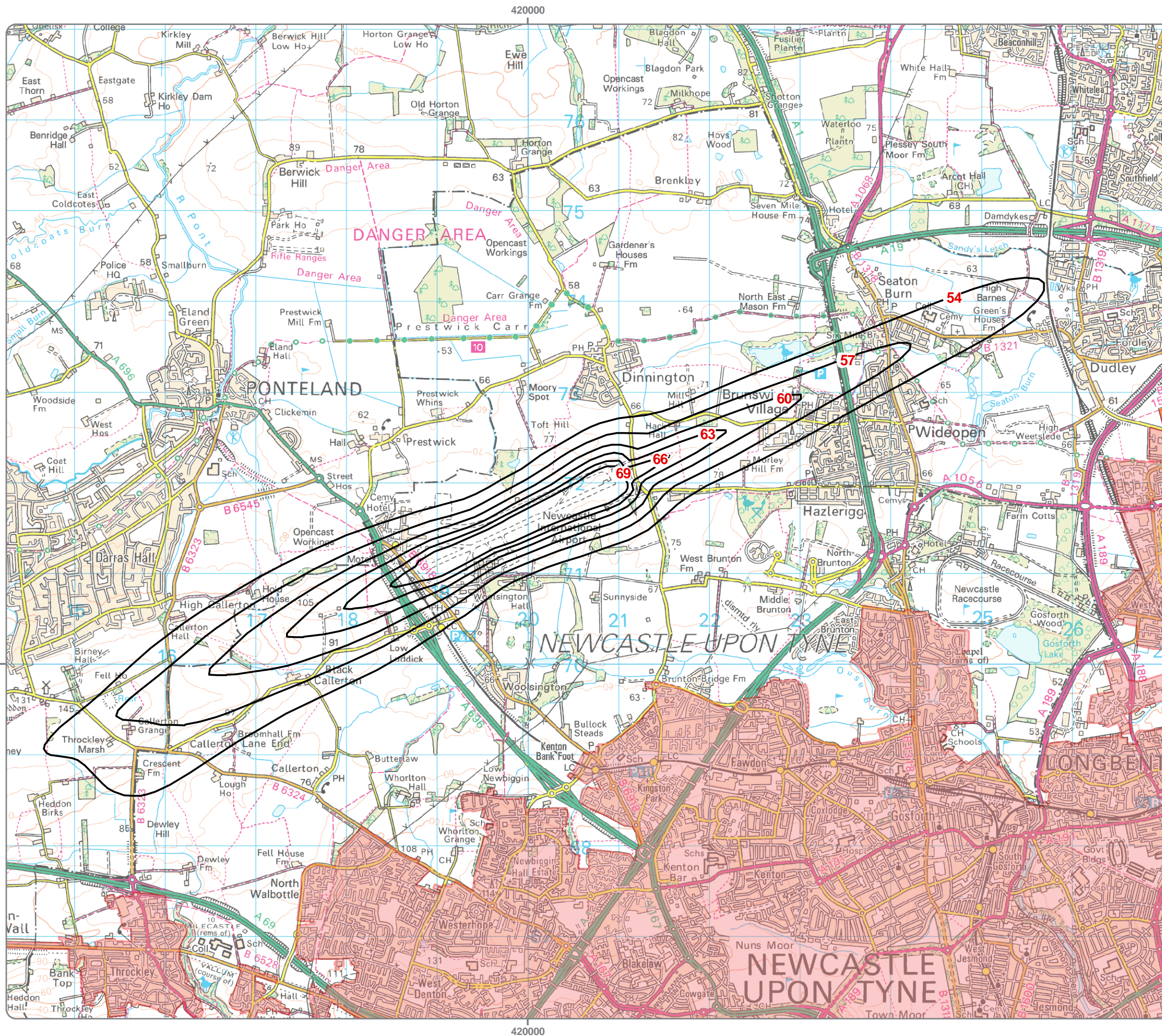
—60— Noise Level Contour (dB)

Agglomeration



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420000

420000

570000

570000





Department  
for Environment  
Food & Rural Affairs

The Environmental Noise  
(England) Regulations 2006  
(as amended)

Newcastle Airport (EGNT)

Levening

Year - 2011

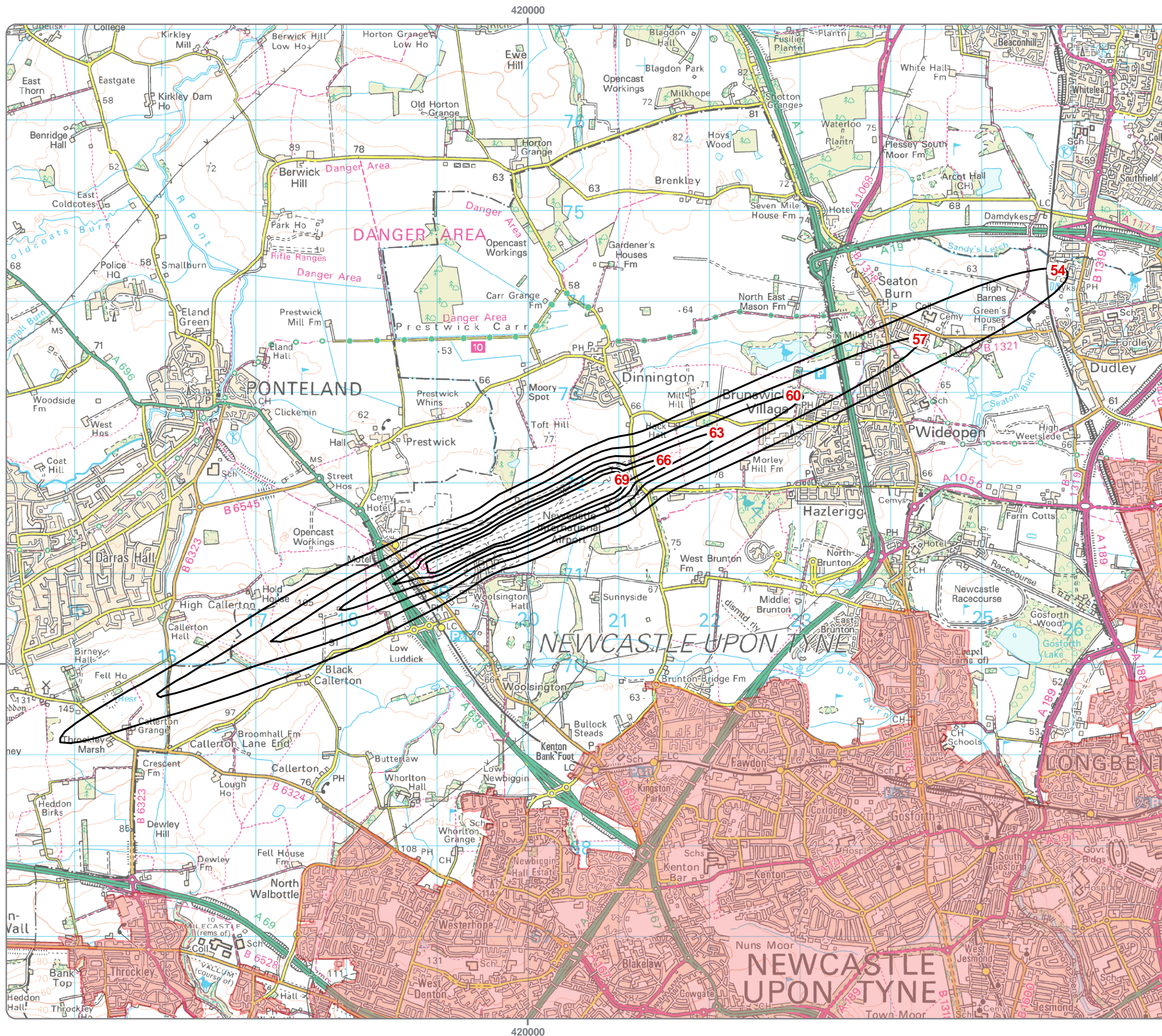
—60— Noise Level Contour (dB)

Agglomeration



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Department  
for Environment  
Food & Rural Affairs

The Environmental Noise  
(England) Regulations 2006  
(as amended)

Newcastle Airport (EGNT)

$L_{Aeq, 16h}$

Year - 2011

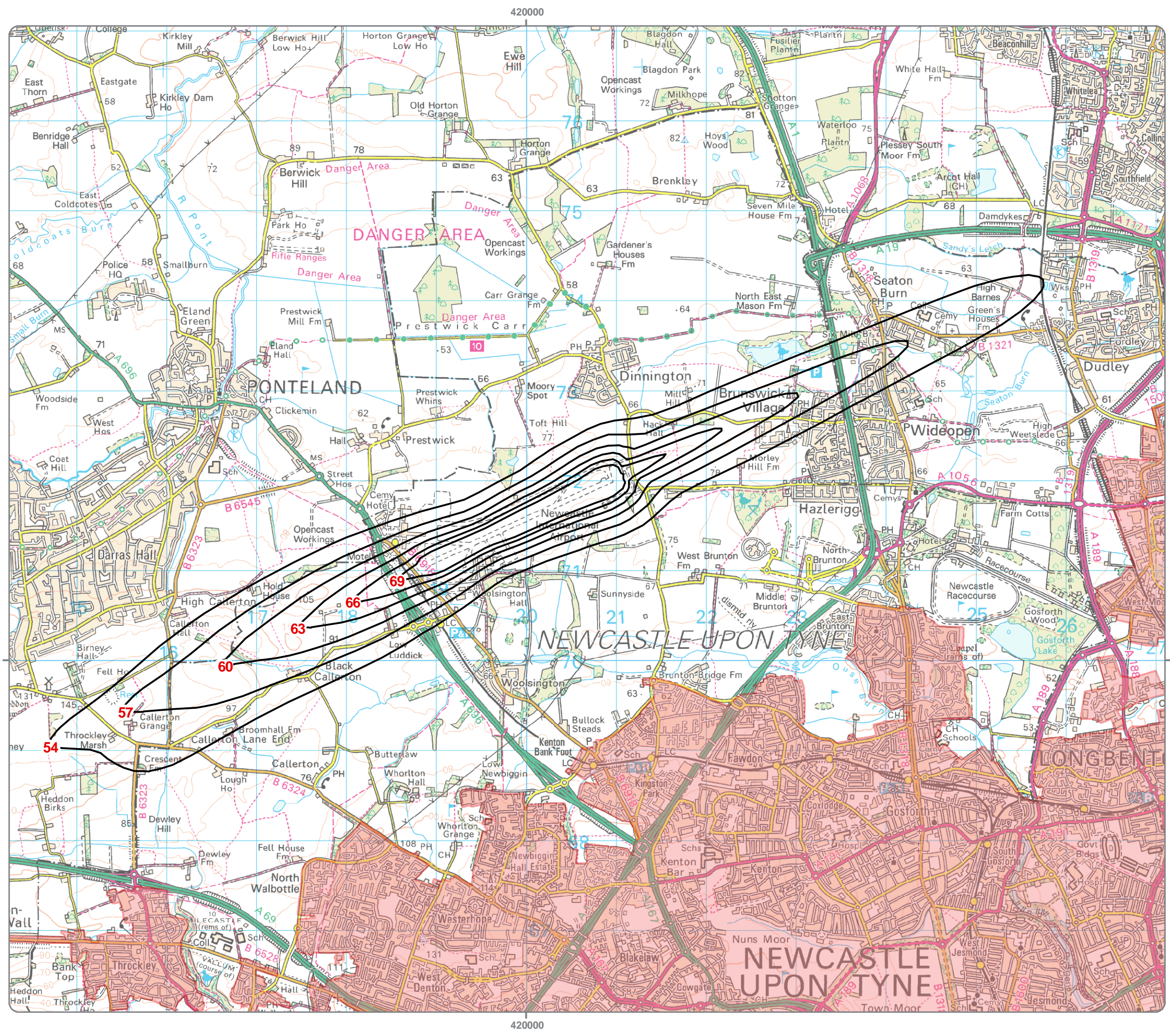
— 60 — Noise Level Contour (dB)

Agglomeration



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## APPENDIX B Financial Information

Task	Approximate installation cost
Installation of a new Noise and Track keeping system	£250 k

# APPENDIX C Aircraft Routes

