



# City of Derry Airport Draft Master Plan

November 2012

### **Foreword**

### By Roy Devine & Sharon O'Connor





We are delighted to publish our Draft Master Plan setting out our vision for the future development of City of Derry Airport (CoDA).

#### **Wide Ranging Consultation**

This is not a definitive document – rather it sets out our ideas and aspirations for the future with a view to stimulating debate and generating ideas. I am sure that we will be asked questions and presented with alternative views to consider before we adopt the Master Plan as a firm statement of intent.

We want to grow and develop an airport that reflects the unique character of the region it serves. Therefore, following adoption of its Master Plan, the Airport will seek further contributions and suggestions about how we can develop a terminal and other facilities to capture the culture, heritage and nature of the region.

Our airport is an increasingly popular gateway to both Northern Ireland and the Republic of Ireland, and offers a speedy alternative to road travel to the airports in Belfast and Dublin. Since purchasing the airfield in 1978, with a view to improving the transport infrastructure for the north west of Ireland, Derry City Council has been fully committed to its growth and, now, is beginning to realise the significant impact on the regional economy envisaged by the Council when they acquired it.

The Master Plan sets our vision for the development of the Airport as a transport gateway for the north west of the island of Ireland. It presents a range of improvements and enhancements to the existing facilities that we wish to develop to meet this vision.

Alongside the Master Plan, CoDA has undertaken a detailed business plan to fully explore and understand the potential of the Airport and its surroundings. This Master Plan is a spatial representation of the outcomes from the business plan. The environmental impacts of the proposals have also been assessed and are presented in summary within this document. CoDA and the Council aims to ensure that, along with growth, the Airport delivers the widest possible economic and social benefits to local communities and the north west region.

#### **Increased Employment/Investment**

In 2011 the Airport was estimated to support nearly 400 full time direct and indirect jobs; and the number of people directly employed at the Airport will play an increasingly important role in the social and economic fortunes of the region – providing, supporting and safeguarding jobs (many requiring high quality skills). The airport currently contributes £14.5 million of Gross Value Add to the region and this is forecast to rise to £35 million by 2022.

We have proposed this plan so that our stakeholders, owners and planning authorities can help shape and protect one of the most significant generators of economic activity in the north west of Ireland

In addition to describing how the airport will satisfy the demand for air travel to and from the north west and how it will support the region's vitally important tourism industry, the plan sets out our determination to maximise the social and economic benefits that a thriving regional airport brings to the local population and area.

#### Mitigating the Impacts of CoDA's Growth

At the centre of this plan is an emphasis on carefully managing CoDA's relationship with local communities ensuring that the Airport manages its relationship with the environment and is sustainable. CoDA will protect its neighbours from our growth whilst managing our wider impacts on the environment.





#### **New Destinations**

Over the last few years the Airport has been one of the fastest growing in the UK and has become an important gateway and a key asset for the north west. In 2011, the airport handled more than 400,000 passengers and we are determined to develop CoDA as the 'Airport of Choice' in the north west - helping local people, businesses and visitors avoid the long and unreliable surface journeys to airports elsewhere. To achieve this requires the Airport to grow its portfolio of more than ten destinations to other parts of the UK and Europe. We anticipate this choice will grow to include a more extensive European network. We will also look to increase inbound tourism to the region to benefit the local economy and grow visitor numbers to the north west

In addition to providing for growing demand for air transport, the Plan safeguards the interests of private and corporate aviation.

#### **No New Runway**

Despite the forecast growth in aircraft movements, the Plan identifies no need to build new runways or to extend the existing one.

#### **More Passenger Journeys**

We believe that by 2030 approximately 1.2 million passenger journeys will start or finish at CoDA. Accommodating this level of demand with facilities that reflect the qualities and standards of service sought by the region will require capital investment.

#### **Local Emphasis**

Derry City Council also sees the Airport as a potential location for high profile business development associated to the Airport. The development of a strategic business park will help to attract significant investment into the region, reinforcing Derry's role as a key driver of the Northern Ireland economy.

CoDA is determined to develop for the benefit of the people it serves and we hope that local communities, businesses, organisations and individuals will engage in the debate about how it will develop in the future.

CoDA has an effective Airport Consultative Committee, which regularly meets to represent the interests of local communities and airport users. In addition to this, further engagement is being sought from across the wider region to help ensure that the Airport can grow in a sustainable way, reflecting the green ambitions of the region whilst still delivering long term economic benefits. We are very keen to take account of the views of those with an interest in the growth of CoDA including local communities, business and tourism, agencies and representatives of local and regional government.

I therefore invite you to consider this Master Plan and its supporting documentation, and recognise that a comprehensive development approach to the Airport and its environs is crucial to the forward planning of the A2 Campsite Corridor and the region as a whole.

It is intended that after the consultation period this Plan will be integrated with local planning policy as an advisory document.

#### The Way Forward

Please make your comments on these proposals by 31st January 2013. There are a number of ways for you to comment are outlined in chapter 12 of this document. All comments and observations will be responded to and considered for incorporation in the adopted Master Plan, which will be published during 2013.

Sharon O'Connor Town Clerk and Chief Executive, Derry City Council

and

Roy Devine, Chairman of Board City of Derry Airport Operations



### **Contents**

#### **Foreword**

#### 1. Introduction

#### 2. Vision for City of Derry Airport

A summary of the vision and objectives that City of Derry Airport has developed for the growth of the Airport.

#### 3. City of Derry Airport Today

A history of City of Derry Airport and a description of the current airport operations and infrastructure.

#### 4. Regulatory & Policy Context

A summary of the relevant statutory local and regional policies and governing bodies.

#### 5. Forecasts for Growth

Traffic growth and performance over the last 10 years and forecast for future growth including new routes and markets

#### 6. Master Plan

An outline of plans for the Airport to 2030 including development of passenger facilities and operational facilities.

#### 7. Airspace

A summary of airspace management at CoDA and potential future change.

#### 8. Surface Access

An outline of plans for surface access.

#### 9. Impacts & Mitigation

A description of how CoDA will develop sustainably bringing social and economic benefits and ensuring that the effects of its operations on the environment and local communities are minimised.

#### 10. Safeguarding, Risk Assessment & Land Acquisition

An overview of the measures taken to safeguard the operations of the Airport together with the methods for assessing risks.

#### 11. Glossary

Definition of terms used in this Master Plan.

#### 12. Next Steps

How CoDA will consult on this Master Plan.

#### 13. References







## **Chapter 1 Introduction**

#### Why Prepare a Master Plan?

The last 30 years have seen a five-fold increase in air travel with each UK citizen now taking an average of three flights per year and the average being just over four flights per year for the population of Northern Ireland. Nationally, the demand for air travel is forecast to grow between two and three times current levels by 2030.

UK Government policy, set out in the 2003 White Paper "The Future of Air Transport" established a framework for the development of airport capacity in the UK to 2030 and set out the Government's case for the future expansion at airports across the country. The Department for Transport (DfT) asked airports to prepare Master Plans defining how the developments and growth set out in the White Paper could be achieved. The White Paper does not itself confer, authorise or preclude any particular development, but sets out policies that will inform and guide the consideration of specific planning applications brought forward by airport owners.

This Master Plan sets out the development proposals for City of Derry Airport to 2030 in accordance with advice from the DfT on the preparation of Master Plans.

In July 2012, the Government provided a Draft Aviation Policy framework for consultation. It is understood that this will replace the 2003 White Paper and that a final framework will be published in March 2013. During the consultation process for this Master Plan, emerging comments on the new Government framework will be taken into account and provided in the final adopted airport Master Plan.

The draft aviation policy framework combined with the proposed Localism Bill will require airports to mitigate their impacts on local communities and it is likely that the adopted policy will be more prescriptive.

Throughout this Master Plan we have abbreviated the name City of Derry Airport to CoDA.

#### **Importance of Air Travel**

The White Paper recognises that airports and air services play a key role in the UK's economy and that the country's airports should:

- Support the UK's position as one of the leading global economies;
- Facilitate the growth of UK tourism;
- Provide the building blocks for future economic development;
- Provide accessibility to all areas of the country;
- Offer opportunities for travel for UK residents; and
- Provide employment and prosperity.

Airports also play a vital role in less direct ways. In 2004, the UK tourism sector employed about 1.4 million people, around 5% of the total working population and around approximately 28 million people visited the UK, spending some £13 billion. These visitors accounted for around 85% of tourism expenditure and 70% arrived by air.

It is estimated that air transport directly supports around 186,000 jobs nationally and contributes about £11.4 billion. Taking account of indirect and induced effects, this rises to 580,000 jobs and £22.2 billion of Gross Value Added (GVA). If UK airports are able to grow to meet their full potential, it is estimated that the industry could support around 675,000 jobs and £32 billion of GVA.

The National Strategy set out in the White Paper supports the generation of this level of economic benefit for the national economy. Importantly, it seeks to spread these benefits to regions both as a means of reducing the pressure on the airports in the south east of England as well as enabling the opportunity for economic growth in the regions.





#### **Northern Ireland**

Chapter 7 of the White Paper covers Northern Ireland and identifies that due to its geographical location, good air links to Great Britain are important for future economic development. Northern Ireland is well served for travel to and from London and other parts of the UK, but currently only has limited connections to other European countries.

Within Northern Ireland, air travel is currently split between Belfast City, Belfast International and CoDA. All cater for scheduled and 'no-frills' carriers. Belfast International also caters for freight traffic. CoDA serves a catchment largely covering the north west of Northern Ireland and Donegal in the Republic of Ireland.



#### **City of Derry Airport**

The City of Derry Airport is located approximately 12km north east of the City of Derry (see Figure 1.1) and is the third largest in Northern Ireland, currently serving just over 400,000 passengers per annum. The Airport is an important gateway for the economy of the northwest of Northern Ireland and the Republic of Ireland.

Specifically referring to CoDA, the White Paper states that:

"Unlike the other two Northern Ireland airports, City of Derry Airport is in public ownership and serves the market for air services in the north west of the island of Ireland. It provides services to a limited range of destinations, but could have potential to develop routes to a number of others.

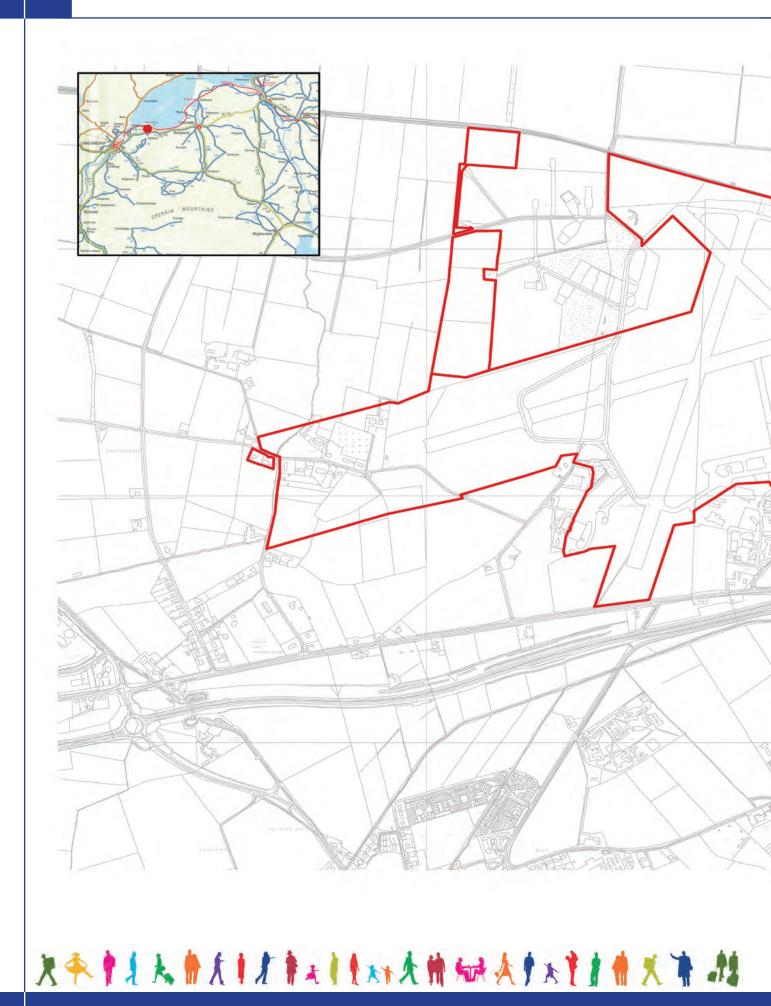
The airport is regarded as having an important role in facilitating access to the north west of the Province and Donegal in the Republic of Ireland, and in contributing to the development of the area. Proposals for a runway extension are currently under consideration and give rise to a number of technical, economic and competition issues outside the scope of this White Paper.

Given the cross-border nature of the market served by the airport, the Northern Ireland authorities will want to consider the airport's future infrastructure requirements carefully, in conjunction with the Government of the Republic of Ireland".

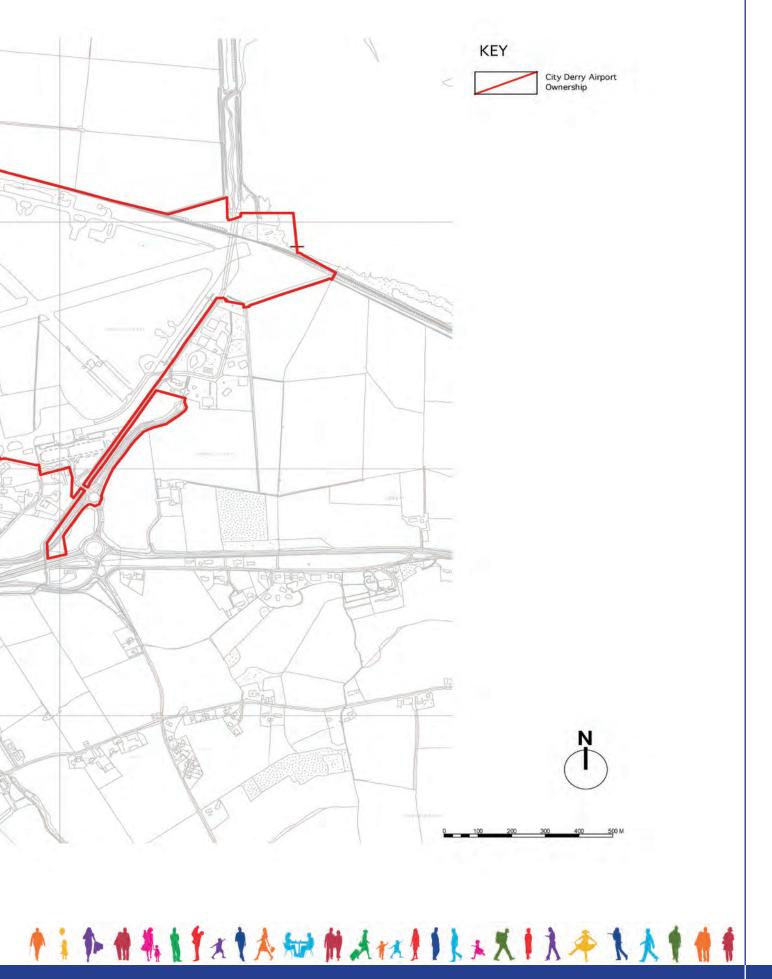
The Airport has been in the ownership of Derry City Council since 1978, during which time the Governments of Northern Ireland and the Republic of Ireland have assisted with substantial funding for major capital projects to develop the airfield including the runway extension referred to in the above extract from the White Paper.

In April 2010, the airport was established as an incorporated company separating its management from Derry City Council (DCC). DCC continue to own the airport and are the sole shareholder. In October 2010, DCC entered into a 10 year contract with Parsons Brinckerhoff, a Balfour Beatty Company, through a Managed Services Agreement to operate the Airport.











#### **CoDA's Economic Benefits**

CoDA acts as a catalyst for the local and regional economy, not only by providing good airline connections to the UK and Europe, but also as an employment centre in its own right.

The Airport supports approximately 380 full time equivalent jobs in the local economy and contributes approximately £14 million of GVA to the Northern Ireland economy and £7 million to the local economy per annum. By 2022 it is estimated that the Airport will support 800 jobs in the local economy and add £35 million GVA to the Northern Ireland economy

#### **Relationship with the Planning Process**

CoDA has structured this document in accordance with the DfT's guidance on the content of airport Master Plans.

The Master Plan is not an application for planning permission for the development of the Airport; its purpose is to provide a framework for the Airport's longer term aspirations.

It describes the way the Airport is expected to develop over the Master Plan period, however this development will remain subject to the planning system unless it comprises development (on operational land) permitted under the provisions of The Planning (General Development) Order (Northern Ireland) 1993. Figure 1.2 shows the extent of the existing operational area of the airfield.

The Plan covers the period up to 2030 and considers the growth options for the Airport including the implication on the local economy and environment. It also presents an indication of the phasing of the development within this timescale. It sets out the short term development potential of the Airport, along with a strategic framework for the longer term development opportunities. As such, the Master Plan will be referenced by CoDA in future planning applications, funding bids and for decisions on making best use of the assets of the airport.

A steering group on the Master Plan was formed by Derry City Council, who have worked closely, though the group, with interested parties and statutory undertakers, including the Department of Environment (DOE) Planning Service throughout the development of the Master Plan proposals.

As part of the preparation of the Master Plan, we have looked closely at the requirements for undertaking a Sustainability Appraisal (SA) of the document. Based on current guidance, and in discussion with the Steering Group, we have concluded that as the Master Plan is not to be adopted as a statutory planning document there is no requirement for a SA to be undertaken. However, as it is intended that the Plan will form part of the evidence base for any new Area Plan, the Master Plan will be subject to a SA at that point.





#### **Draft Master Plan**

This draft Master Plan is being issued for consultation following which CoDA will revise this Master Plan taking account of comments.

The likely programme for publication of the adopted plan is:





#### **Structure of the Document**

#### **Master Plan Life**

This Master Plan will be reviewed every 10 years.

The Master Plan has been informed by a number of technical reports and studies undertaken by a range of specialist consultants, as well as the CoDA Management Team and Derry City Council. These include:

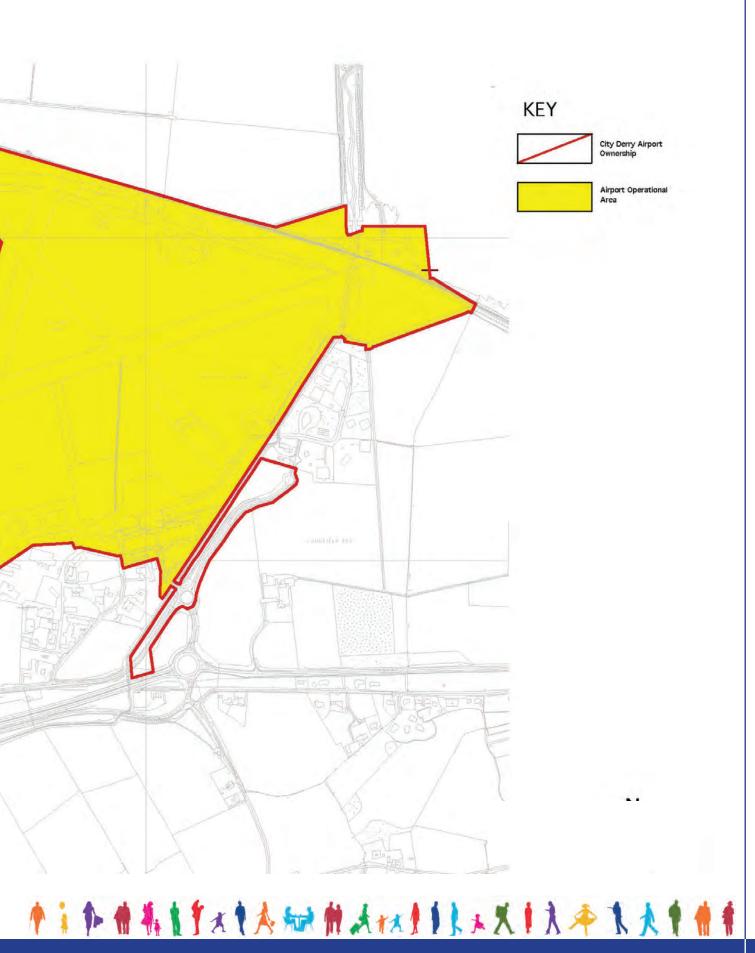
- Airport Business Plan including forecast studies and catchment area analysis;
- Baseline Report including an environmental appraisal, background on the Master Plan optionneering exercise and details of the consultation undertaken; and
- Airport Economic Impact Study



Figure 1.2 Operational Area











# Chapter 2 Vision for City of Derry Airport

City of Derry Airport's vision is to be:

## "The Airport of choice for the north west of Ireland"

In delivering this vision CoDA will work to:

- Perform as a viable entity providing long-term benefit for the north west of Ireland;
- Improve air access to the north west;
- Reduce and eliminate the Council subvention of the airport by improving its profitability;
- Ensure that the airport performs as a key driver for the north west region;
- Ensure full compliance with regulatory and safety requirements; and
- Manage the airport in a fit for purpose condition

This Master Plan sets out development plans for the airport to 2030. The objectives are to;

- Continue to put people first by meeting and exceeding the expectations of our customers, stakeholders and the community;
- Improve affordable access to more destinations, with a better frequency for business and leisure travellers to and from the region;
- Maintain a sustainable airport by carefully managing our relationship with the environment;
- Provide the right infrastructure, at the right time, at a cost that the airlines and their passengers can afford:
- Reduce the need for passengers to travel long distances to other airports and to develop international linkages through good connections to major European hubs;
- Maintain the highest standards of safety for passengers, staff and the community to ensure that all of our activities are carried out safely and securely;
- Maximise the contribution that CoDA provides as an economic driver creating employment and stimulating investment in support of the economic growth and development of the region;

- Set out the long-term growth plans of CoDA in order that these are taken into account by authorities in preparing their development, economic and transport plans and associated policies to make investment decisions;
- Develop a vibrant and profitable business as a stable and a secure foundation to ensure future investment and continued development of CoDA;
- Improve public transport access to the Airport and increase opportunities for sustainable travel to the Airport;
- Ensure that the Airport makes a full contribution to the profile and image of Londonderry/Derry and the north west or Ireland by developing high quality facilities that reflect the aspirations of the region; and
- Enable the continued use of the Airport by general aviation and flying schools and support the development of existing and additional aviation related Small Medium Enterprises (SMEs) within the boundaries of the Airport

#### **Our Aims**

In terms of its operations, CoDA aims to:

- Achieve a throughput of 1.2 million passengers per annum by the year 2030 through new route development and the growth of existing services;
- Aspire to a throughput of 1.6 million passengers up to 2050;
- Operate and develop the Airport in a manner that ensures full compliance with the safety and security requirements of regulatory bodies including the Civil Aviation Authority (CAA) and DfT.
- Operate to the highest standards of performance and efficiency, incorporating the best models of good practice for customer care, aircraft handling and commercial development;
- Maximise the use of existing land within the ownership of the Airport for aviation related uses and associated activities as a source of additional revenue; and
- Achieve established targets in terms of operating costs and income generation in order to reduce subvention and improve future profitability.



#### **Regional Economic Improvement**

The growth of the airport will increase employment both directly at the airport and also by acting as a catalyst to the growth and development of the region.

We forecast that the contribution that CoDA will make to the local economy will increase from the current level of £7 million per annum to over £14 million per annum.

CoDA is committed to using local suppliers and local produce where possible to supply services to the Airport. We will encourage our airport business partners to also support the local supply chain.

CoDA will develop a community relations programme and we encourage communities to take an active interest in our operation. We aim to reach out and support local projects and initiatives whilst at the same time developing our business.

#### **Sustainable Development**

As a minimum, it is anticipated that CoDA will comply with all relevant safety and environmental legislation in the management and operation of ground based operations at the Airport.

CoDA is committed to ensuring that future development is undertaken in a sustainable manner and CoDA fully supports the Northern Ireland Government's 2006 sustainable development strategy 'First Steps Towards Sustainability' which identifies the following key priorities for action:

- Climate Change and Energy;
- Sustainable Consumption and Production;
- Natural Resource Protection;
- Environmental Enhancement:
- Sustainable Communities;
- Governance for Sustainable Development; and
- Learning and Communication.

These priorities lie at the heart of the Master Plan and have informed the development of the Airport's own sustainability principles which are highlighted in Table 3.1.

Development of the Airport will undoubtedly exert pressure on the environment. However, through careful planning and, in partnership with stakeholders, we believe that any such pressures can be managed to facilitate growth without resulting in a negative impact on the environment.





Table 3.1 Sustainability Principles

| Theme                              | Principle  |  |
|------------------------------------|--|--|
| Sustainability Learning and Skills | To provide opportunities to develop skills in: sustainable construction renewable technologies, environmental site management and resource efficiency.                     |  |
| Health and Wellbeing               | To provide a clean and safe environment for staff, visitors and local residents, through maximisation of best practice environmental and sustainability opportunities.     |  |
| Equality in Meeting Basic Needs    | To provide opportunities for improved access to employment, income and learning opportunities. Compliance with Section 75 of the Northern Ireland Act.                     |  |
| Wise use of Resources              | To develop an energy, water and resource efficient ground-based airport operation, maximising the use of local renewable energy and minimising carbon emissions and waste. |  |
| Low Carbon Access                  | To provide the opportunity to promote and plan for low carbon access through demand-responsive public transport and alternative fuels.                                     |  |
| Sustainable Sourcing               | To provide the opportunity to use locally and ethically sourced goods and services where possible – and strengthen local/regional supply chains.                           |  |
| Distinctiveness and Diversity      | To provide opportunities to protect and enhance the local natural environment, biodiversity and cultural heritage.   |  |
| Inclusive Decision Making          | To provide the opportunity to develop more informed participation in public and community decision-making.   |  |
| Long Term Approach                 | To provide a long term, sustainable approach to an integrated development with lasting beneficial outcomes for society, economy and the environment.                       |  |

In this context, the environmental impacts and mitigation of the proposed development of CoDA are presented in chapter 8. This appraisal seeks to:

- Identify, as early as possible, potential environmental issues related to the Airport's development;
- Help ensure that the overall environmental impact of the Airport's development is minimised;
- Enhance the potential to realise environmental gains related to the development of CoDA; and
- Develop opportunities for management and mitigation of any impacts.



# Chapter 3 City of Derry Airport Today

#### **History**

As part of the national defences during World War II, various military bases were established throughout Northern Ireland. Along the eastern coast of Lough Foyle the Government located three air bases at Ballykelly, Maydown and Eglinton. The Eglinton air base was a Fleet Air Army base named HMS Gannet and was primarily used to provide convoy air cover for the North Atlantic Fleet. After the war the base remained as a military establishment into the 1950's at which time the Ministry of Defence returned much of the land in and around the base to the original landowners.

Some limited commercial activities were undertaken at the airfield during the 1960's when Emerald Airways operated a Glasgow service. During the 1970's the only flying at Eglinton, as it was then known, was carried out by Eglinton Flying Club. This flying club and flight school is still based at the airport to this day.

It was not until 1978 that Derry City Council took the decision to purchase the airfield with a view to improving the transport infrastructure for the north-west of Ireland. At the time, this was a very forward-thinking decision particularly since there were no airlines operating at the airfield at the time and most of the airfield property had reverted to local landowners.

Over the intervening years the Airport has slowly developed. Loganair introduced the first scheduled flight between CoDA and Glasgow in 1979. This route was the only route for ten years until British Airways introduced a daily Manchester service in 1989.

The Council gradually acquired most of the airfield property. However, by the late 1980s it became evident that the Airport needed major investment if it was going to achieve the potential envisaged in 1978. The Council applied for grant aid from the European Regional Development Fund and a major redevelopment programme was undertaken from 1989 to 1993. £10.5 million was spent upgrading all of the facilities at the Airport with 75% grant aid provided from Europe and 25% from Derry City Council.

This programme upgraded runways, taxiways, access roads, navigation equipment and runway lighting, with the centrepiece being a new purpose-built terminal and fire station

The programme was completed early in 1994 and the new terminal was officially opened in March of that year. The name of the Airport was officially changed from Eglinton to the City of Derry Airport (CoDA). At that time there were still only two scheduled routes carrying approximately 40,000 passengers per year. With the completion of the physical work the emphasis switched to route development and the search for new carriers. 1995 saw the first major breakthrough with the arrival of Jersey European Airways.

During 1998 and 1999 various safety improvements were undertaken at the Airport with funding received from the British and Irish Governments as well as Derry City Council. These improvements opened the way for larger aircraft to use the facilities at the airport and in summer 1999 Falcon Holidays and Ryanair launched services.

Since then, a number of carriers have launched a range of services from the Airport to UK destinations including a low fare route to London Stansted in 1999.

Thirty years after its acquisition the airport is beginning to have the impact on the regional economy envisaged by the Council in 1978. CoDA is being developed as the main gateway to the entire north west region for both business and leisure traffic. The Airport is ideally placed to serve not only the City but its natural hinterland in County Derry, North Antrim, Tyrone and Donegal. This cross border dimension has been recognised by both Donegal County Council and the Irish Government who have clearly identified the Airport as a principal gateway.







#### **CoDA Today**

As of May 2012, the scheduled routes operating out of CoDA include the following destinations:

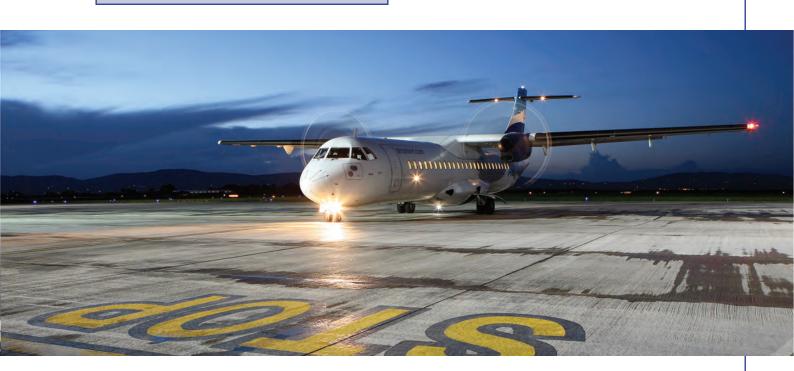
Alicante
Birmingham
Tenerife
Glasgow
Prestwick
Faro
Liverpool
London Stansted

In addition, the Airport operates summer charter routes to:

| Palma/Majorca |  |
|---------------|--|
| Reus/Salou    |  |
| Lanzarote     |  |

Unfortunately the Public Service Obligation route to Dublin was terminated by the Irish Government during 2011 and the current operators at CoDA are Ryanair and Falcon/Thomson.

The most recent CAA survey data available for CoDA is for the year 2006. This data provides information on the profile of passengers travelling through the Airport, which shows that of the total number of passengers travelling in 2006, around 55.6% were travelling outbound from Derry and around 44.4% were travelling inbound, i.e. resident outside Northern Ireland or the Republic. Overall about 13% of passengers were travelling on business, with the remainder (87%) travelling for leisure-related purposes. The majority of leisure travellers were travelling to visit friends and relatives, with 63% of overall passenger numbers in 2006 falling into this category, and around 20% of the total travelling as 'pure' tourists. Overall, around 62% had journey origins or destinations within Northern Ireland and around 38% within the Republic of Ireland.





#### **Existing Airport Facilities**

The current configuration and arrangement of the airport is shown on Figure 3.1 and set out in detail below.

#### **Passenger Facilities**

#### **Terminal**

The existing terminal building comprises approximately 2,800m² of floor space consisting of core operational, commercial and passenger uses and a small operations staff area on a mezzanine level, an administration suite on the first floor and an Air Traffic Control (ATC) tower above.

The terminal is structured to incorporate four main operational areas, each with specific passenger services and commercial areas:

- Landside departures incorporating airline desks, food and drink outlets, toilets, check-in area and central search queuing;
- Airside departures incorporating a central security search area, departures lounge/seating, a catering outlet, two shops, business lounge, toilets and departures gates;
- AirsideArrivalsincorporatingarrivals, immigration and customs control accommodation, baggage reclaim area, toilets, customs channels and baggage desk; and
- Landside arrivals incorporating a 'meet and greet' area with seating, information desk, a food and drink outlet, car hire desks, transport ticket desks, cash ATM's and car park payment machines.

#### **Public Transport**

Immediately outside the terminal building is the City of Derry Airport bus stop. This is served by routes to Londonderry/Derry, Limavady and Coleraine. An area is provided for taxis immediately ouside of the terminal.



#### **Car Parking**

The majority of passenger and staff car parking is located to the front of the terminal in two areas, both accessed off the one way circulatory road. Approximately 450 spaces, for both short and long stay parking, are provided in these locations.

In addition a summer long-stay parking area has been developed a short walk to the east of the terminal.

All car parking areas are located on-site and are subject to barrier access and egress restrictions.

#### **Car Hire Facilities**

Car hire facilities are provided to the east of the car park. This area accommodates customer pick-up and drop-off facilities, offices for the car hire companies and a wash down facility.





#### **Operational Infrastructure**

#### **Runway, Taxiways and Aprons**

CoDA has one operational runway, which is just less than 2,000 metres in length and capable of handling an aircraft up to the size of a Boeing 757. A complete resurfacing of the runway was completed in November 2009. There is no parallel taxiway linking the apron to the ends of the runway but instead Taxiway Bravo connects to the apron at a central position along the runway and Taxiway Alpha connects the apron to the eastern end of the runway. Large commercial aircraft (B737) use taxiway Bravo resulting in arriving and departing aircraft taxing along the runway after landing or prior to take-off.

The existing apron at the Airport accommodates four stands. Improvement works were completed in November 2009 to this area to make it compliant with CAA requirements.

#### Fire Station, Fire Training and Fuel Farm

The existing fire station and fuel farm are located to the west of the terminal building. The fire training rig is currently located adjacent to the electrical substation, on hardstanding between the runway and Taxiway Alpha.





#### **Western Apron**

#### **Access**

Access to the Airport terminal for passengers and staff is via Airport Road, off the A2 Clooney Road. As part of the Department for Regional Development (DRD) Road Services 10 year Regional Transport Strategy (RTS) for Northern Ireland works have recently been completed to dual the A2 between Maydown Roundabout and CoDA.

These road improvements assist in alleviating the existing congestion along this part of the road. It has also greatly improved accessibility to the Airport for those travelling from the west. The existing A2 Clooney Road has been retained for local access via a link to the new airport roundabout.

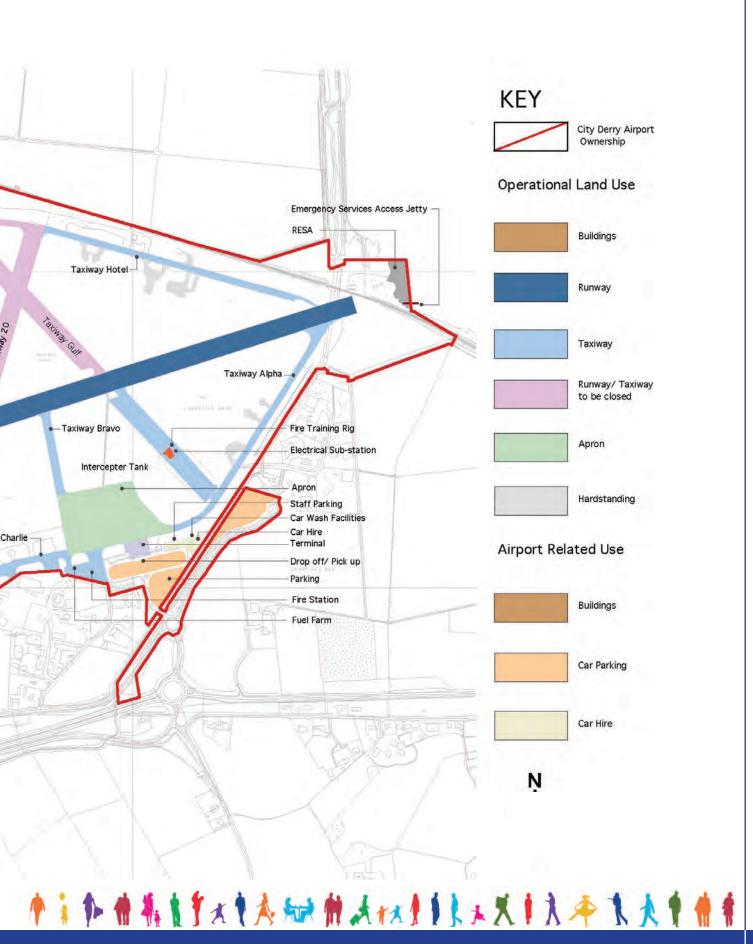
Emergency vehicle access to the airfield is provided, in accordance with CAA guidelines, via numerous gates in the security fence around the airport, along with a slip-way on Lough Foyle.



Figure 3.1 Operational Land Use







#### **Surrounding Uses**

Beyond the Airport land ownership boundary there are a range of existing uses, including:

- Longfield Industrial Estate (West and East)

   including light industrial units and storage,
   several of which are currently vacant;
- Longfield Care Home located off Longfield Road within Longfield Industrial Estate West, providing a purpose built home for elderly and young physically disabled residents;
- Longfield Inn public house and restaurant located off Longfield Road within Longfield Industrial Estate West;
- Residential properties located within Longfield Industrial Estate West and East, off Airfield Road, Clooney Road, Kee Road, Station Road and Donnybrewer Road;
- Eglinton Equestrian Centre indoor facility located to the north of the main runway and accessed off Lower Airfield Road; and
- Warehouse and Industrial units located off Lower Airfield Road, adjacent to the Equestrian Centre.

To the north of the Airport, forming the northern boundary to the site, is the main Belfast to Derry railway line. Beyond this, to the north east, lies Lough Foyle, part of the River Foyle estuary.







### **Chapter 4**

### **Regulatory and Policy Framework**

#### Introduction

There are a range of policies which influence the future growth and development of CoDA, in addition to the existing regulatory framework within which the Airport operates. This chapter presents a brief outline of those policies and legislation relevant to CoDA, which influenced the preparation of the Master Plan, including:

- National policies, including Government policy in relation to aviation;
- Regional development policies which determine economic objectives, set transport priorities and ensure that regional sustainability objectives are met; and
- Local policies which ensure that the social and economic benefits of the Airport's growth and development are balanced with the needs of the local communities and environment

The following sections provide an overview of the legislation and policies which have influenced the development of this Master Plan. It also sets out the key statutory and regulatory requirements within which development must comply.

#### **UK Airports Policy**

#### **Aviation White Paper**

National policy on aviation is set out in the Government's White Paper, 'The Future of Air Transport', published in December 2003. This sets out a strategic framework for the development of airport capacity over the next 30 years against a background of wider development in air transport.

However, in July 2012 the Government published a consultative document for a new Aviation Policy framework. It is considered likely that the new policy will have limited impact in Northern Ireland in the short-term and consequently the remainder of this Plan continues to refer to the 2003 document.

However before the plan is finally adopted, CoDA will ensure that it takes account of the new framework policy as this becomes defined by the DfT.

#### **Approach to Growth**

The Government's approach to airport expansion is a balanced one that:

- "Recognises the importance of air travel to our national and regional economic prosperity, and that not providing additional capacity would significantly damage the economy and national prosperity;
- Reflects people's desire to travel further and more often by air, and to take advantage of the affordability of air travel and the opportunities this brings;
- Seeks to reduce and minimise the impacts of airports on those who live nearby, and on the natural environment;
- Ensures that, over time, aviation pays the external costs its activities impose on society at large - in other words, that the price of air travel reflects its environmental and social impacts;
- Minimises the need for airport development in new locations by making best use of existing airports where possible;
- Respects the rights and interests of those affected by airport development;
- Provides greater certainty for all concerned in the planning of future airport capacity, but at the same time is sufficiently flexible to recognise and adapt to the uncertainties inherent in long-term planning".

The Government policy seeks to encourage growth to serve local and regional demand, subject to environmental constraints. The White Paper states that encouraging growth will have a number of benefits, including:

- · Supporting regional economic growth;
- Relieving congestion at more over-crowded airports, particularly in the south east of England, and therefore making better use of existing capacity;
- Reducing the need for long-distance travel to and from airports; and
- Giving passengers greater choice.



#### **Northern Ireland**

In relation to Northern Ireland, the White Paper identifies that, given its geographical location, good air links to Great Britain are important to its future economic development, and highlights that whilst Northern Ireland has good links to London and other parts of Great Britain, connections with the European continent are limited.

With specific regard to CoDA, the White Paper acknowledges the Airport's role in facilitating access to, and contributing to the development of the north west of the province and identifies that, whilst the Airport currently provides services to a limited range of destinations, it could have potential to develop additional routes. In light of the Airport's crossborder market, the White Paper concludes that "the Northern Ireland authorities will want to consider the airport's future infrastructure requirements carefully, in conjunction with the Government of the Republic of Ireland".

#### **Airport Master Plans**

The White Paper sets out that the Government expects airport operators to produce a Master Plan or, where appropriate, update existing plans to take account of the conclusions on future development contained within the White Paper. Master Plans should set out proposals for development to 2015 in some detail with indicative land use plans included for the period from 2016-2030. Master Plans should also take account of the Regional Development Strategy (and the Regional Transport Strategy incorporated within it) and local transport plans in Northern Ireland. These documents should, in turn, take account of airport Master Plans when they are revised.

#### The Future of Air Transport Progress Report

In December 2006, the Government issued a Progress Report that assessed progress on the policies and proposals set out in the White Paper. This report confirms that the Government remains committed to the strategy set out in the White Paper, stating that "it strikes the right balance between economic, social and environmental goals".

The Progress Report focuses strongly on the issues of climate change, the need for sustainable growth in air transport and the key role this growth will play in the future economic development of the UK. It identifies that, since the Civil Aviation Act 2006, airport operators now have statutory powers to introduce noise control schemes and fine aircraft that breach such controls. It also provides powers for all airports to introduce charges that reflect the pollution generated by each aircraft type and supports the inclusion of aviation within the EU Emissions Trading Scheme.

The Progress Report notes that demand for air travel continues to increase and forecasts growth from 228mppa to 465mppa in 2030 and, as such, confirms continued support for the expansion of regional airports in order to relieve congestion elsewhere and support the growth of regional economies.

In August 2011 the Government issued revised passenger forecasts for a 50 year horizon. These confirmed the previous forecasts in the 2006 document.

#### **Planning Policy**

Planning policies are set out at the regional level primarily within the Regional Development Strategy (RDS) which is supported through a series of Planning Policy Statements (PPSs). Local development plans, which may be in the form of Area Plans, Local Plans or Subject Plans, must be prepared in accordance with the Regional Development Strategy. These contain more detailed policies and proposals to guide development in local areas.





## **Shaping Our Future: Regional Development Strategy for Northern Ireland 2025**

The RDS was published by the Department for Regional Development in 2001. It sets out the long-term strategic framework for development of Northern Ireland to 2025. Policies contained within the RDS will be material to decisions on planning applications related to CoDA and have consequently informed the preparation of the Master Plan.

The RDS seeks to strengthen key hubs, corridors and gateways in order to make best use of regional assets to accommodate growth, locating CoDA within the Western Corridor of the Regional Strategic Transport Network (see Figure 4.1). In this context, the RDS recognises Derry as the principal urban centre in the north west region and highlights its pivotal role in cross-border and international trading relationships. It sets out the following key objectives for Derry and the north west:

- To strengthen the role of Londonderry/Derry as the regional city and transport hub of the north west, including by supporting the expansion of CoDA:
- To encourage economic growth and industrial development to meet the employment needs of a fast growing population; and
- To enhance the city through continuing regeneration and establish a unique city tourism market

The Republic of Ireland's National Spatial Strategy complements the RDS by identifying Derry and Letterkenny, in Ireland, as a linked regional gateway, reflecting the potential to work in partnership to promote economic and social development and promote cross border co-operation.





#### **Planning Strategy for Rural Northern Ireland**

The Planning Strategy for Rural Northern Ireland (PSRNI) was published by the Department of the Environment in 1993. It covers all of the towns, villages and countryside of Northern Ireland outside Belfast (and adjoining built up areas) and Derry.

The Strategy establishes the objectives and the policies for land use and development appropriate to the particular circumstances of Northern Ireland which need to be considered on a scale wider than the individual District Council Area.

Planning Policy Statements (PPSs) are gradually replacing the policy provisions of the Planning Strategy for Rural Northern Ireland and each PPS indicates those policies of the Strategy that it is superseding. In the meantime, the Planning Strategy remains in force for those topics not covered by a PPS or other policy publication and where still applicable, remain a material consideration until it is completely superseded.

Policy PSU3 of the PSRNI relates to transport facilities, including airports, and stipulates that proposals necessary to maintain operational requirements or to expand facilities will be supported provided that:

- It is necessary for the current operational requirements of the facility;
- It forms part of a scheme for the improvement to or for an appropriate level of expansion of the existing facility;
- The proposal is for development clearly related to and dependent on siting adjacent to the facility. General industrial or warehousing development is unlikely to be permitted adjacent to airports which are located in rural areas;
- The proposal would not result in an unacceptable reduction in the amenity of adjoining residents or businesses as a result of noise, dust, smell, pollution or excessive traffic generation;
- In relation to port development the proposal would not lead to an unacceptable impact on coastal ecology or processes; and

The proposal would not result in an unacceptable impact on any area, feature or species of nature conservation importance or feature of archaeological or historic interest.

#### **Planning Policy Statements**

## Planning Policy Statement 13: Transportation and Land Use

This PPS has been prepared to assist in the implementation of the Regional Development Strategy to guide the integration of transportation and land use. PPS 13, at paragraph 74 states;

"The RDS places considerable importance on the potential role of the regional gateways, including the ports and airports, as appropriate locations for major economic development and additional employment generation. It is likely therefore, that regional gateway air and seaports could generate considerable additional volumes of commercial and commuter traffic in the future. Only a small proportion of this traffic is currently conveyed by means other than private road vehicles. In future the emphasis will be on ease of access by alternative modes, including access by public transport users, pedestrians, cyclists and people with restricted mobility and, where feasible, by rail freight".

## Planning Policy Statement 21: Sustainable Development in the Countryside

This Draft Planning Policy Statement sets out planning policies for development in the countryside. For the purpose of this document the countryside is defined as land lying outside of settlement limits as identified in development plans. The provisions of this document will apply to all areas of Northern Ireland's countryside.

#### **Derry Area Plan 2011**

The majority of the Airport is situated within Derry City Council area but outside the development boundary for any settlement and not covered by any specific designation.





The Derry Area Plan was adopted in May 2000 in order to inform the policy framework and broad land use proposals, and used to guide development up to 2011.

Although the Area Plan does not contain policies specifically relating to CoDA, the generic policies contained within it remain a key consideration in the determination of applications for development. A Local Plan was to be prepared for the area in and around the Airport.

To date, this has not been carried out. In the future, and whilst there is no specific time frame, it is likely that most planning functions will be devolved to local authorities, therefore it is envisaged that future planning policies relating specifically to CoDA will eventually be contained within the Local Development Plan for the area

#### **Draft Northern Area Plan 2016**

A portion of the Airport lies within the Limavady Borough Council boundary under the Northern Area Plan 2016 (Draft) published in May 2005. Paragraph 3.2.6 of the Plan states:

"The Department proposes to prepare a Local Plan for the area in and around the City of Derry Airport, which adjoins the North West periphery of the Limavady Borough Council area. The Local Plan is likely to include lands in the vicinity of the main airport access road that itself is located within the Limavady Borough".

#### **Airport Safety and Design**

CoDA operates within the terms of a license issued by the Civil Aviation Authority (CAA), the body charged with ensuring that UK airports operate in accordance with the International Civil Aviation Organisation (ICAO) criteria. Future development will be undertaken in accordance with the requirements of the CAA as set out in CAP168: Licensing of Aerodromes, which sets out the standards required at UK licensed aerodromes relating to, for example, the height and design of buildings and structures, the layout of runways and taxiways, and operational procedures.

All development work at CoDA will be undertaken in accordance with the CAA's requirements that are laid out in their publication CAP168, including:

- The layout, separation and widths of runways and taxiways;
- Aircraft stand sizes and apron layouts;
- The height and design of buildings and structures; and
- The airport fire service facilities.

Future development of CoDA will be designed to ensure that risks are minimised. For example the location of future facilities will be determined to reduce runway crossings to a minimum in order to reduce the unnecessary risk of runway incursions.

#### **Development Control**

Airport developments are subject to statutory control as laid down in Town & Country Planning Legislation. Small airport developments may however be progressed without the need to submit a planning application, these developments are progressed under General Purpose Development Order (GPDO) powers. Such works are limited and do not include:

- Development on non-operational land;
- Non-operational buildings (those unrelated to the movement or maintenance of aircraft, or the embarking, disembarking, loading, discharge or transport of passengers, livestock or goods);
- Development falling within the scope of the Environmental Assessment Regulations;
- The construction or extension of a runway; and
- A passenger terminal with a floor space greater than 500m², or the extension of the existing terminal beyond 15% of the original terminal floor space.

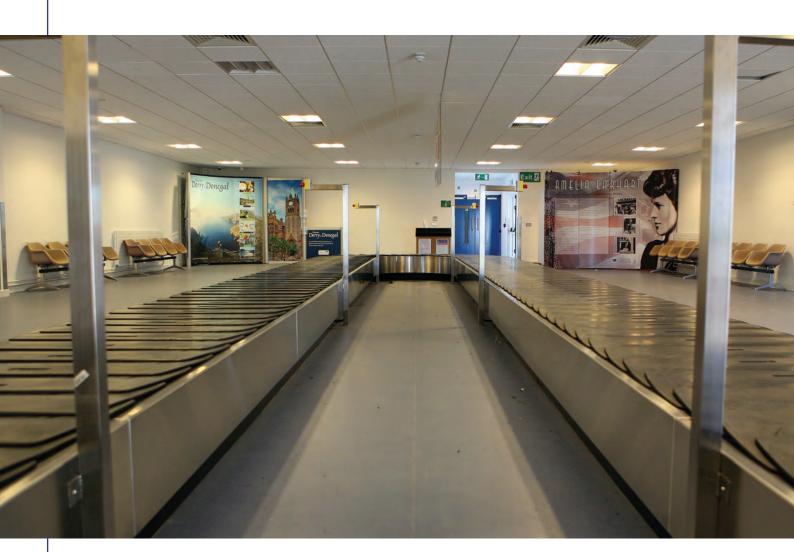


#### **Airport Security**

The Department of Transport (DfT) regulates the security standards and anti terrorism measures at the UK's airports. These standards control both the operational running of the Airport and the form and design of new and existing facilities. Security directions from the DfT relate to such key matters as the segregation of departing and arriving passengers, the screening of baggage and the access to secure airside areas.

#### **Environmental Regulations**

CoDA operates within a number of nationally applicable policies and standards and has established key environmental targets that are described in chapter 9. The commitment to developing in a managed sustainable manner underpins CoDA's approach to achieving the goal of carbon neutrality in its ground operations.





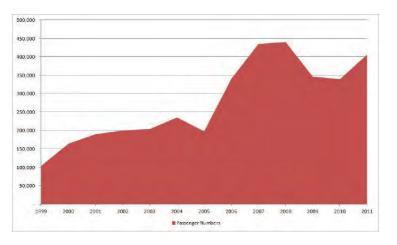


# **Chapter 5 Passenger Forecasts**

#### Introduction

CoDA has experienced significant growth in passenger traffic over the last decade. Passenger numbers have grown from around 104,000 in 1998 to around 400,000 in 2011. The figure below illustrates the overall trend in passenger numbers:

Figure 5.1



The average growth over the period is 25% compared with a UK average of 5% meaning that CoDA was one of the fastest growing regional airports during this period.

The decrease in 2009 and 2010 reflects the combined effects of the global financial crisis and introduction of air passenger duty; however in 2011 passenger numbers started to increase as Ryanair added additional services to the airport.

Up until the late 1990s passenger numbers at CoDA were approximately 50,000 per annum and were generally composed of a number of short haul services on small aircraft to Manchester and Glasgow. Breakthrough was achieved in 1999 when Ryanair and Falcon/Thomson commenced operations to CoDA. This resulted in a rapid expansion in passengers to the current volumes. In 2011, Ryanair accounted for approximately 85% of passengers.

There is currently virtually no freight traffic to the airport. The majority of air cargo is carried in the belly hold of passenger aircraft. Given Ryanair's business model relies on fast turnarounds they currently do not carry belly hold cargo. Given that Belfast International Airport provides a significant cargo operation it is unlikely that any general cargo other than specialist charter and one off operations will be scheduled at CoDA.

#### **Passenger Mix**

The current passenger mix can be defined as follows:

- 56% travelling outbound
- 44% travelling inbound
- 13% are travelling on business
- 24% of passengers are travelling on leisure
- 63% of passengers are travelling to visit friends and relatives
- 62% had journey origins or destinations within Northern Ireland
- 38% had journey origins or destinations within the Republic of Ireland

Scheduled domestic (intra UK) services still account for the largest proportion of passenger traffic and in common with other airports in Northern Ireland there is only a limited international route network, generally summer sun destinations.



The charter market has been reasonably static at CoDA with Falcon/Thomson serving two destinations for a 20 week season in the summer months. A number of other charter operations have been handled through CoDA over the decade to a variety of destinations, however, as a result of falling demand caused by macroeconomic circumstances, the airlines have generally consolidated these services into Belfast or Dublin.

With the continued development of CoDA in the past decade and a gradually increasing route network, an increasing number of business travellers are using the Airport. It is anticipated that additional frequencies per week and added double daily operations on some routes will significantly increase the percentage of business travellers.

#### **Air Traffic Movements**

Air Traffic Movements (ATMs) are defined as a single take off or landing on a runway. Figure 5.2 shows the historic air traffic movements since 2000.

Figure 5.2:

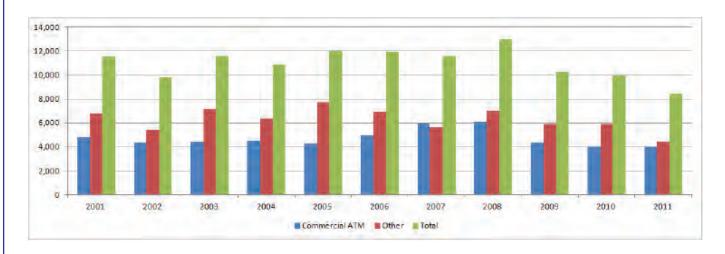
Commercial ATMs are defined as air transport movements by scheduled or charter aircraft. The other ATMs are a collection of movements due to:

- Air taxi;
- · Business Aviation;
- Positioning flights;
- Test & training;
- Aeronautical clubs;
- Private aviation; and
- Military.

The common name given to non-commercial ATMs is general aviation.

Compared to other airports of similar size, CoDA has a relatively low number of ATMs and this is due to:

- Relatively low GA use; and
- Average size of commercial aircraft which at 180 seats is considerably larger than other similar airports that often have a blend of small and medium sized aircraft.







The size of commercial aircraft and reduced passenger numbers reflects the reduced commercial ATM numbers since 2009; whilst the reduction of GA activity is due to both the macro economic climate as well as poor facilities presently available at CoDA for General Aviation. In 2008 the average passenger load per ATM was 73, whilst in 2011 this increased to 100 as services on smaller aircraft were withdrawn.

#### **Alternative Airports**

The alternative airports to CoDA serving the catchment are;

- Belfast City;
- Belfast International;
- Knock; and
- Dublin.

Belfast City Airport is approximately 80 miles from CoDA and International is 65 miles. These airports capture over 60% of traffic from CoDA's catchment.

Whilst Knock has developed an extensive route network over the last few years, it is over 90 miles from CoDA and given the relatively poor surface transport links the penetration of Knock into the CoDA catchment is relatively low.

Dublin has rapidly expanded services in the last few years and given the inequality in Air Passenger Duty between the Republic of Ireland and Northern Ireland it has captured a significant volume of traffic from the North. It is difficult to determine the penetration of the CoDA catchment, but it is considered that Dublin may present a significant alternative for long haul passengers who would previously have transferred through London.

#### Other Aviation

In addition to Air Transport Movements for passenger and mail flights there are numerous other aircraft movements including:

- General Aviation;
- Business Aviation;
- Military;
- Test and Training;
- Positioning Empty; and
- Other.

Positioning Empty includes aircraft arriving for maintenance and aircraft arriving or departing empty to operate services or after diversions.

#### **CoDA Flight Schedule Summer 2012**

The following table summarises the commercial flight schedule for Summer 2012:

| Destination        | Airline          | Weekly<br>Frequency |
|--------------------|------------------|---------------------|
| London<br>Stansted | Ryanair          | 9                   |
| Liverpool          | Ryanair          | 9                   |
| Prestwick          | Ryanair          | 7                   |
| Birmingham         | Ryanair          | 4                   |
| Faro               | Ryanair          | 2                   |
| Alicante           | Ryanair          | 2                   |
| Tenerife           | Ryanair          | 1                   |
| Salou              | Falcon / Thomson | 1                   |
| Palma              | Falcon / Thomson | 1                   |

Until March 2011 a Public Service Obligation Route operated a double daily service to Dublin. However, this service was terminated at the end of the contract period when the Government of the Republic of Ireland could no longer financially support the route. In addition during summer 2011 a five times a week service operated to Manchester.



#### **CoDA Catchment Area**

A study of CoDA's passenger catchment area has been undertaken in order to feed into the preparation of both the Business Plan and the Master Plan. This study has made particular reference to the location of Belfast International Airport and Belfast City Airport, along with drive times to/from CoDA.

The study has shown that the population catchments within 30, 60 and 90 minute drive times are as follows:

- 30 minute drive time 158,785 population;
- 60 minute drive time 690,322 population; and
- 90 minute drive time 1,571,360 population.

Due to the proximity of Belfast International and Belfast City Airports, the 90 minute drive time catchment area needs to be reduced in size to provide a more reliable forecasting figure (excluding areas which are closer or equidistant from either Belfast airports). This is shown at Figure 5.3 and encompasses a population of 577,161. It is anticipated that passengers will also be attracted where there are similar drive times to CoDA or either Belfast airports.

The level of attraction will also be dependent upon the routes offered and the marketing power of the relevant airline, its schedule and fare availability.

Figure 5.3:



Source - City of Derry Airport Catchment Analysis







#### **Forecasts for Future Growth**

The passenger traffic forecasts have been produced by:

- Growing traffic demand for the CoDA catchment from the current base; and
- Estimating the market share that CoDA captures of the traffic from the catchment area.

Traffic forecasts for CoDA are unconstrained such that they are made on the basis that the necessary infrastructure at the Airport to deliver the traffic will be in place. Specifically no runway, terminal, air space or navigation aid constraints have been assumed.

Our forecasts take into account the down turn and reduced demand caused by both the global financial crisis as well as punitive taxation through air passenger duty. However, they do not take account of the short term impact of other 'shocks' which temporarily affect the demand for air travel.

In August 2011 the DfT published UK Aviation Traffic Forecasts for the period up to 2050. CoDA was not included in the UK National Air Passenger Allocation Model utilised in this forecast, and values were only provided for Belfast City and International Airports. The overall UK forecast to 2050 has been presented as a constrained and an unconstrained case depending upon additional capacity being provided in the London and south east system. The constrained case assumes that no additional capacity is developed and that demand is cascaded to regional airports. This results in overall passenger numbers for the United Kingdom being constrained relative to the 2003 White Paper. Given the geographic separation of Northern Ireland, there is little difference between the constrained and non-constrained cases and the forecasts predict passenger traffic volumes of 12mppa by 2030 rising to 27mppa by 2050.

#### **Underlying Traffic Demand**

The underlying traffic demand is based on a 2006 survey providing traffic data broken down by:

- Type of service;
- · Origin airport;
- Final destination/interim connecting points;
- District of surface origin;
- Purpose of travel; and
- · Nationality of passenger.

The data has then been adjusted to reflect macroeconomic changes and has then been used to determine the viability of new routes that could be established.

#### CoDA Passenger Forecasts to 2015 and 2030

Three different scenarios have been modelled to develop long-term passenger forecasts for the airport and the results are summarised below;

|                      | 2011    | 2015    | 2030      |
|----------------------|---------|---------|-----------|
| Low Case             | 406,000 | 480,000 | 825,000   |
| Planning<br>Forecast | 406,000 | 510,000 | 1,200,000 |
| High Case            | 406,000 | 550,000 | 1,620,000 |

All scenarios assume some additional routes. Existing routes are operating at a relatively high load factor and it would be difficult to achieve more than 5-7% increase in passenger through load factor improvements.

The Low case forecast assumes that growth through:

- One additional high frequency charter route;
- Added rotations on existing scheduled routes;
- Some additional short haul routes; and
- Capture of leakage from catchment by 2022 thereafter a 1.5% GDP increase.





The Planning Forecast assumes growth through:

- As low with additional charter and more scheduled routes;
- Greater use of regional aircraft types:
- Increase of 2% after capture of leakage; and
- That by 2030 CoDA handles 10% of the Northern Ireland market compared to the current market share of 6%.

The High case forecast is based on the DfT 2050 forecasts and assumes that CoDA would gain 6% of the market at this point.

Figure 5.5:

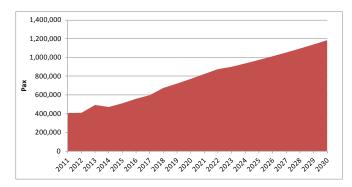


Figure 5.5 illustrates the planning forecast and the dip in 2014 is due to an assumed step up in passengers in 2013 as a result of the Londonderry/Derry City of Culture year.

The planning forecast is used in this Master Plan to define demand up to 2030 for airfield, terminal and landside facilities. The high forecast has been used to safeguard for long term expansion.

The forecast also assumes:

- Continued reliance on low cost airlines;
- Existing carriers are able to offer additional routes and destinations as passenger facilities are extended;
- Introduction of a regional airline carrier;
- Ad hoc seasonal charter traffic;
- Mix of aircraft between B737-800 to Q400 types;
- Introduction of lean routes with 19 seat aircraft; and
- The forecast assumes growth on existing routes through additional frequency as well as the introduction of new routes that could include the following destinations.

| UK and Ireland | International                         |
|----------------|---------------------------------------|
| Manchester     | Netherlands –<br>Maastricht/Amsterdam |
| Edinburgh      | Germany                               |
| Bristol        | Barcelona                             |
| London Gatwick | Lanzarote                             |
| Newcastle      | Malaga                                |
| Southampton    | Berlin                                |
| Isle of Man    | Paris                                 |
| Dublin         | Munich                                |
| Cork           | Italy                                 |

## Air Traffic Movement (ATM) Forecasts

ATM forecasts have been developed on a detailed analysis of routes considering indicative aircraft types suitable for the range of the route and the operator envisaged.

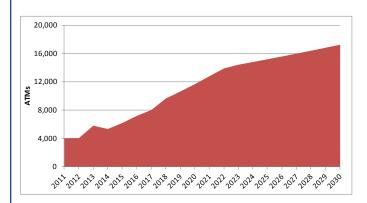
The aircraft mix is predicted to be:

- 19 seat aircraft for lean routes;
- 48-78 seat turbo prop aircraft for shorter haul regional routes; and
- 189 seat aircraft for high volume UK and international routes.



The planning forecast passenger related ATMs are forecast to rise to 6,200 by 2015 and to 17,250 by 2030 as shown in the graphic below.

#### Figure 5.6:



#### **Growth of Business Aviation**

There has been an historically weak demand for business aviation services at CoDA. This has been due to lack of proactive marketing, poor economic outlook and poor consolidation of the high end tourist market. CoDA will be developing a more comprehensive offer and utilising a dedicated Corporate Aviation Manager and team to market the product to:

- · Inbound 'high end' tourism
- In and outbound air taxis and executive providers
- Local inbound and out bound businesses
- · Other specialist customers

## **Growth of Other Aviation**

Other general aviation movements have reduced by approximately 2,500 movements per year over the last five years. Whilst some of this reduction is due to the economic environment, a significant proportion is due to the poor facilities available at CoDA for operators. There is a single multi-use hangar to the west of the airport, but in 2010, due to the deteriorating condition, the hangar was generally withdrawn from use. This meant that there was virtually no covered parking available for operators and as a consequence many left CoDA for other specialist airfields.

An investment project will be completed in 2012/13 to re-clad the hangar and to provide other improvements and it is forecast that this will result in most of the operators returning and with increased marketing will increase the number of GA flights.

Whilst it is difficult to accurately estimate GA movements due to a variety of effects that influence demand we consider that by 2015 GA ATMs will be 6,250 per annum. Thereafter we predict that it will grow modestly reflecting a gradual increase in demand for private aviation.







# Chapter 6 Master Plan

Through the 2003 White Paper the DfT required airports to prepare Master Plans defining how the development and growth set out in the Master Plan could be achieved. Most Master Plans have defined two periods of development; present to 2015 and 2015 to 2030. Given the date of production of the CoDA Master Plan and the fact that the current facilities at the airport can accommodate the forecast demand up to 2015, this plan defines development that will be required to meet the demands up to 2030.

#### Introduction

CoDA will develop facilities that meet the needs of its customers and business partners, ensuring at all times that new facilities are designed to meet our commitments to sustainable development. The proposals contained within this section are for additional passenger facilities and commercial aircraft parking. Development will take place incrementally to ensure that additional capacity matches passenger demand.

These proposals have been developed from the passenger forecasts included within chapter 5 of this Plan. The forecasts will be regularly reviewed and if growth is higher than anticipated then the development proposals will be revised. Similarly if there is a slowdown in the rate of growth, developments would be deferred. Additionally advancements in technology may mean that these development proposals are subject to change.

### **Master Plan Design Process**

The preparation of the Master Plan has been undertaken following a clear design process comprising the following stages:

- Assessment of the existing airport in environmental and design terms, combined with wider economic considerations and airport operational requirements;
- Identification of the key constraints to the development of the Airport;

- Stakeholder engagement and input into the constraints and opportunities identified;
- Assessment and appraisal of the various concept options against a series of site specific criteria including operational, land ownership and environmental issues;
- · Selection of a Preferred Option; and
- Development of the Preferred Option into more detail within a Master Plan.

The above process are set out in more detail in the supporting City of Derry Airport Environmental Baseline Report with the Preferred Option and Master Plan outlined in this chapter.







#### Investment in 2007 - 2010

Following the temporary withdrawal of CoDA's aerodrome licence in 2007, a significant capital investment programme was agreed between the CAA and Derry City Council. Since 2008 approximately £50m of investment has been made to improve airfield infrastructure, terminal facilities and car parking.

The works can be summarised as:

| Airfield Pavements | Western end turning circle, runway resurfacing, provision of compliant runway end safety areas, new Taxiway Bravo and expansion of apron.   |
|--------------------|---|
| AGL                | Aeronautical Ground Lighting Improvements with a replacement of runway and taxiway systems and new control installation. New approach lights will be installed in the Lough to the east on the runway include 2012.         |
| Navigation Systems | Provision of new instrument landing systems and other navigational aids. The final phase to replace the voice switch and control system will be completed by Q1 2013.   |
| Drainage           | Improvements to airfield to reduce risk of flooding.  |
| Terminal           | A number of projects have been completed including the extension of the departure lounge to provide retail units and increased lounge space, an extension to the arrivals area and a re-configuration of the security area. |
| Car Parking        | Rationalisation of existing car parks to a single car park, creation of a new summer overflow car park and provision of new car park control equipment.   |

There are a number of further projects planned for completion by March 2013 including a further extension of the airside lounge to provide a call forward queuing area.

The capacity of the Airport depends on a number of factors:

- Aircraft stands;
- Runway; and
- Terminal.

The terminal will probably continue to be the first element of infrastructure that will be stretched at peak demand. Whilst airports often report peak capacity in terms of annual passenger numbers, the actual constraint is the busy hour rate (BHR) through the various processes within the terminal. If a daily demand schedule is compressed into a short period of time, it is likely that the facilities will become full and demand will be constrained; however, if the same demand schedule is 'stretched' over a longer period as a sympathetic schedule, then the facilities over this period would be able to handle more passengers. The current limiting constraints are likely to be:



## **Security Search**

The current configuration limits throughput to approximately 150-200 passengers per hour and given the characteristic of the low cost traveller with high volumes of hand baggage, the throughput will be at the lower end.

## Departure Lounge

The capacity of the lounge is limited to just over two B737 of passengers at any time. The call forward area will enable another one aircraft of capacity.

Given a reasonable schedule, it is concluded that the current capacity of the terminal is an outbound BHR of 175pph and an annual passenger throughput in the range of 650,000 to 700,000ppa.

## **Preferred Option**

The Preferred Option for the development of CoDA is shown in Figure 6.1.

The proposals within the preferred option have a number of benefits, including:

- All operational elements and requirements accommodated;
- Opportunities for associated aviation uses included;
- Development within current CoDA land ownership maximised;
- Phasing of development will cater for increase in passenger numbers; and
- Environmental impacts are mitigated.

#### Airport Master Plan

A detailed Master Plan has been prepared which provides more detail on the Preferred Option. Figure 6.2 shows how the Airport proposes to develop in the period up to 2030 and is described within this section.

The proposals have been developed to ensure that the operational requirements of the Airport can be met alongside the development of other uses which will assist with ensuring the economic viability of the airport. The operational and other requirements of CoDA have been defined in the Business Plan and are as follows:

## **Operational Requirements**

- Expansion of the airport facilities to handle a passenger throughput of up to 1.2 mppa and safeguarding for up to 1.6 mppa;
- Establishment of a parallel taxiway link with the runway;
- Creation of a general aviation enclave to the west of the airfield with improved facilities;
- Provision of sufficient car parking, ideally within one location and within walking distance of the terminal to minimise the reliance on shuttle buses; and
- Re-organisation and expansion of the car hire area.

## **Other Requirements**

- Maximise opportunities for aviation related businesses to be attracted to, and located at, the Airport:
- Allow for the expansion of the existing flying school: and
- Maximise opportunities for other uses, including employment and leisure, to be located at the Airport.

Good design of passenger and operational facilities is also important in maximising the quality of journey and user experience of those travelling through and working at the Airport. This should be achieved through the creation of a sense of identity and place which is easy to understand and move around, is safe and secure, and enhances travelling and working experiences.

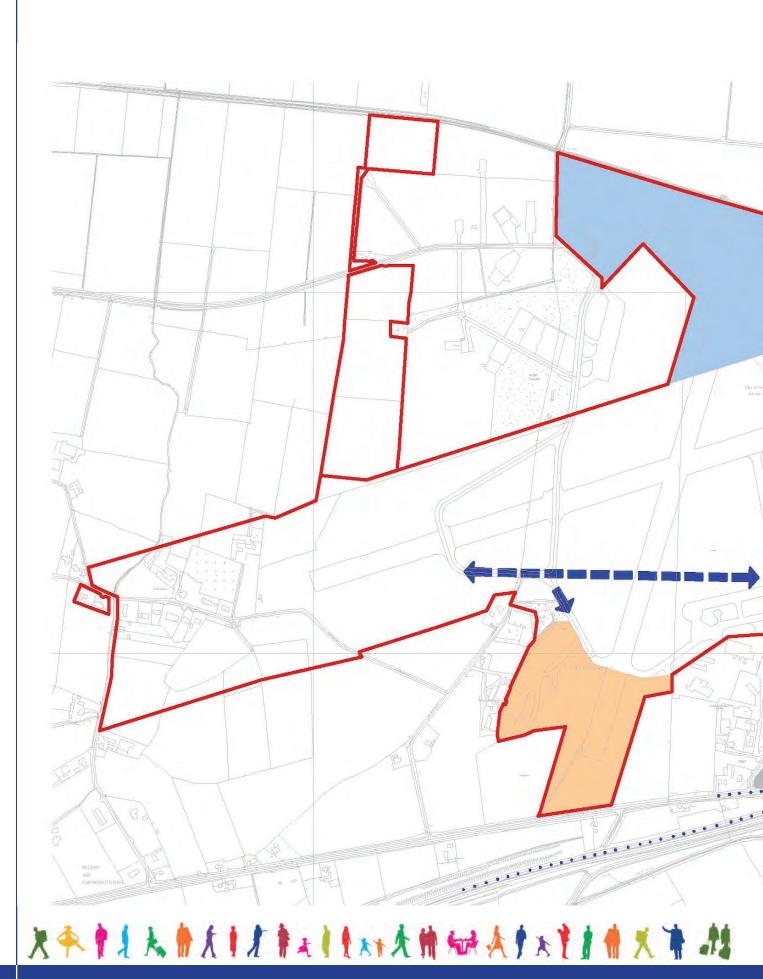
Whilst the proposals do not seek to prescribe the detail of the development of the Airport, they are set out in order to ensure that the strategic development framework for CoDA fully meets the requirements of the Business Plan.



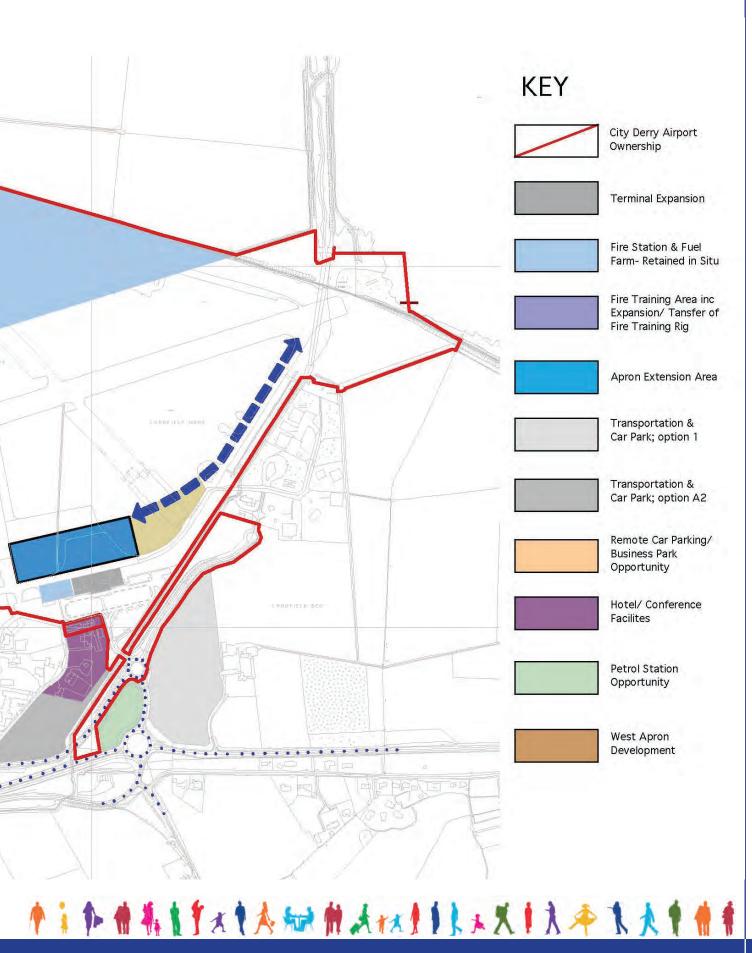


## This page left deliberately blank



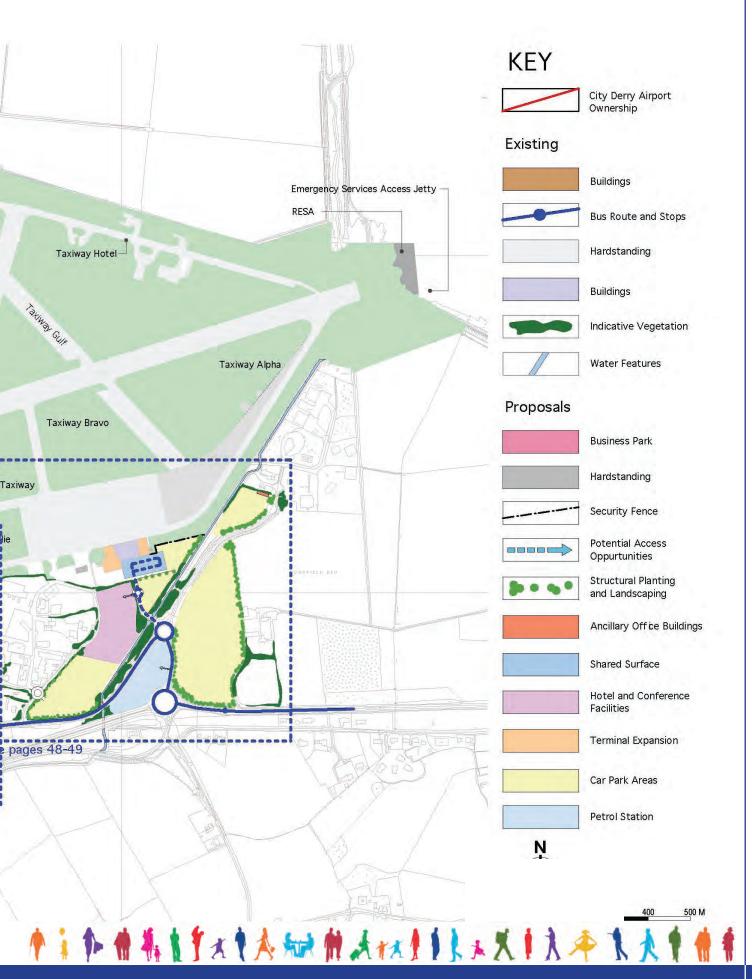












## **Expansion of Passenger Facilities**

## **Terminal Development**

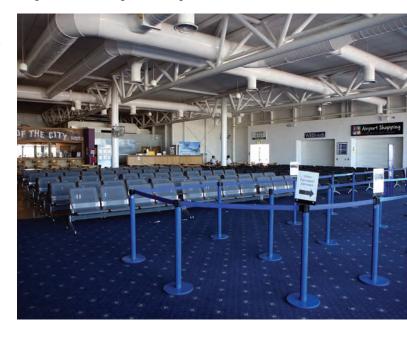
Whilst an extension was provided to the Departure Lounge and Arrivals Hall during 2010, the current terminal building will not have sufficient capacity to facilitate the passenger growth forecast in this Master Plan. As a result of its inefficient layout, the terminal already struggles to cope with anything more than two to three B737 size aircraft scheduled outbound within an hour period. The situation in the departure lounge is compounded by the characteristics of Ryanair passengers who tend to queue before the plane has arrived. As a consequence, almost 40% of the lounge is in effect 'wasted space' forming the queueing area.

For a number of historical reasons the current terminal has various areas which present operational difficulties. Whilst a number of these have been resolved since 2010 there are still a number of remaining issues. These include:

- The existing entrance to the terminal is restricted by the siting of adjacent offices;
- The current control room and adjacent offices and stores occupy prime space within the terminal. These should be sited 'back of house' with the control room preferably away from the terminal;
- The hold baggage search and sort area to the rear of check-in is severely restricted;
- The capacity of the airside departures lounge is restricted during peak hours and whilst the retail offer has been expanded, more space is required for additional commercial revenue generation.
- There is a potential conflict between departing and arriving passengers accessing the western stands:
- There are only 6 check-in desks; whilst currently a high proportion of passengers are pre-checkedin and have hand baggage only, future growth will require additional check-in space; and
- As the BHR increases there is likely to be a conflict of passenger flows between check-in desks and security access.

These existing operational difficulties are addressed as part of the Master Plan, with improvement works to the terminal proposed to be carried out in three phases.

Phase 1 will seek to address the short term issue of crowding in the departure lounge through the provision of a pre-boarding queuing area of up to 400m². In addition a small amount of additional retail space will be generated through re-configuration.



## **Expansion of Passenger Facilities Phase 2**

To accommodate the predicted growth, a series of incremental extensions will be developed to the existing terminal building as well as modifications to the existing building. This will increase the overall ground floor terminal area from 2,800m² to approximately 6,000m². However, the final area will be dependent upon the peak busy hour rate.





The expansion will include:

- Baggage handling facilities also required to incorporate additional screening equipment;
- Check in desks;
- Departure Lounge;
- Retail and restaurants/bars;
- Departure gates and covered walkway as the airport grows it is likely that the airside area will be segregated between lounge and departure gates;
- · Additional Arrivals; and
- Improved back of house

Incremental expansion will be carried out in a series of sub phases with both new build additional space and a re-configuration of existing space. The additional space will be developed;

- To the west of the Terminal up to the fire station access road:
- · To the east of the Terminal; and
- To the north of the Terminal taking one lane from the current airside road configuration.

It is not anticipated that the southern face of the Terminal will be extended to the south.

All new development will be designed to be accessible to the disabled and compliant to the Disability Discrimination Act 1995.

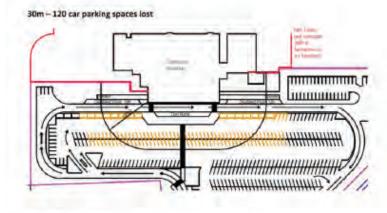
# Safeguarding Future Expansion of Passenger Facilities Phase 3

Phase 2 will deliver Terminal facilities that can handle the planning forecast of 1.2mppa. Whilst development beyond this number of passengers is not included in this plan, land use will safeguard land to the east and west of the terminal to enable future expansion beyond 2030 to enable potential growth to 1.6mppa.

## **Terminal Frontage**

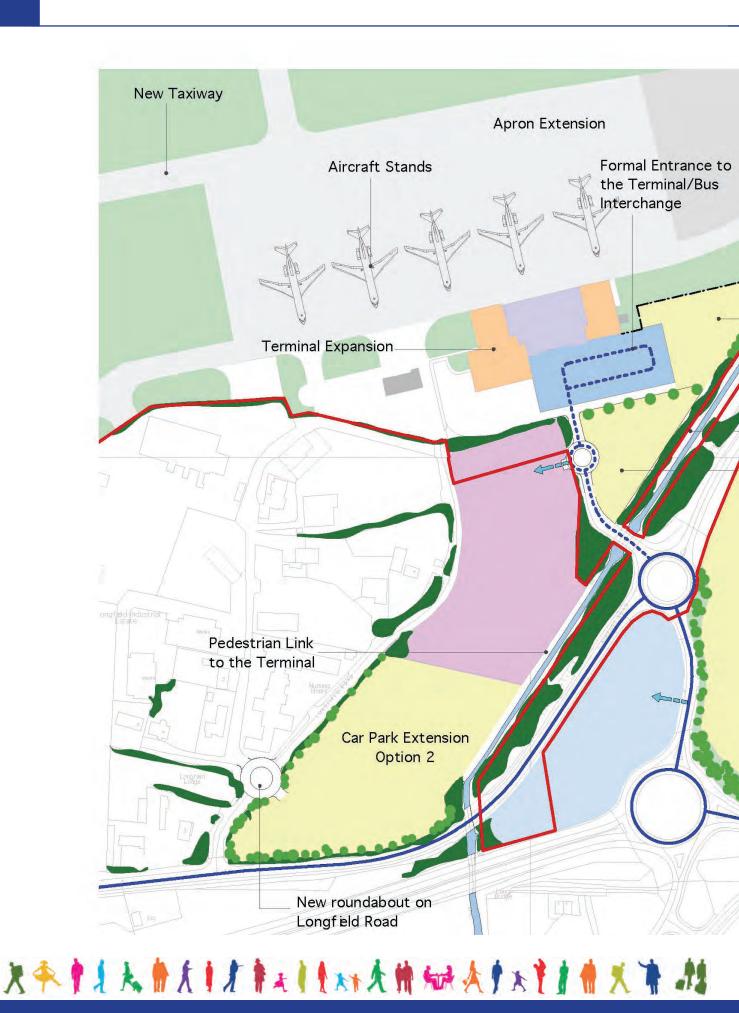
The Committee for the Protection of National Infrastructure (CPNI) has advised airports that a protected zone should be established at the front of UK airport terminal buildings with adequate protective measures to inhibit a vehicle carrying an explosive device from reaching the building. It is likely that this measure will be introduced at CoDA in 2013/14 and the effect would be to provide physical protection at the front of the terminal. This will require a realignment of the forecourt and road system as well as the removal of a number of car parking spaces. The plans below demonstrate the area that would be required for the two options under consideration.

Stand-off Distance Options - 30m, 20m, 15m and 10m.



20m – 90 car parking spaces lost









## **New Internal Road System**

A new internal road system to facilitate direct and improved access for public transport and access and egress from the car parks adjacent to the Terminal will be provided.

The new infrastructure will be provided in phases concurrent with the terminal expansion.

## **New Passenger Transport Interface (PTI)**

CoDA aims to support initiatives to increase the use of public transport for both passengers and staff. A new PTI to the front of the terminal will be provided to accommodate existing and improved bus and coach services, minibuses and shuttles, taxi drop off and collect as well as car hire pick up and drop off. This dedicated facility will provide bus stops with direct and short covered access to the terminal building, incorporate taxi services and will be segregated from entrances to the car parks. CoDA will implement a licensing and charging scheme for public service vehicles using the Terminal Forecourt during 2013.

## **Car Parking**

CoDA currently has 450 car parking spaces adjacent to the terminal and up to 200 spaces in the overflow car park to the east of the terminal. The changes to protect the front of the terminal could reduce the existing stock by 120 spaces, leaving the airport with a net 530 spaces.

In order to accommodate the car parking demand generated from 1.2 mppa, it is estimated that 1,400 car parking spaces will be required, composed of:

| Public spaces | 1,250 |
|---------------|-------|
| Car hire      | 100   |
| Staff         | 50    |

A number of options for car parking have been evaluated. These seek to locate the car parking as close to the terminal as possible to ensure a simplified passenger experience as well as reducing operating costs that would arise from a bus operation to a remote car park. However, the airport does not own all land adjacent to the terminal and so a number of options are available for car parking:

- Utilise existing airport land use existing car park and current overflow areas – these will create up to 500 spaces after the works to protect the terminal and the creation of a PTI. These spaces will be prioritised for short term, premium and car hire.
- Acquire or lease land to east and west of airport entrance for long term parking; and/or
- Create a summer only overspill car park to the south of the disused runway on land owned by the airport. This would require a bus operation to and from the Terminal.









### **Car Hire**

An area accommodating storage, office space pick up and collect is proposed off Airport Road, to the south of Longfield Industrial Estate East. It is anticipated that wash down, vehicle preparation 'bulk' vehicle parking will be ultimately located on the development area to the south west of the airfield.

#### **Hotel/Conference Facilities**

The site for a new hotel with conference facilities is proposed on brownfield land, immediately to the south of the expanded terminal building. This is likely to comprise a 3 star facility with up to 150 bedrooms and cater for both the business and tourist traveller.

As this site is located outside the ownership of CoDA, implementation of such a use is likely to be market driven and implemented by a private developer.

#### **Petrol Station**

The isolated area of land immediately to the west of the new A2 roundabout is proposed as a new petrol station. Such a facility would not only benefit from passing trade from those travelling along the A2 but also from car hire customers returning vehicles to the Airport. As with the hotel use, the petrol station is likely to be brought forward by a private developer.

## **Utilities Expansion**

CoDA has internal services for the distribution of telecoms, electricity, waste water and surface drainage. There is no gas supply to CoDA.

A number of these services will need reinforcement/ replacement in the future and CoDA is committed to invest to ensure that it has the capacity to support the future growth of the Airport.

In addition to these services, CoDA has standby electrical generation for essential aviation equipment such as the control tower and aeronautical ground lighting as well as the Terminal building. These will be reinforced and expanded as required to ensure the continued safe operation of the airport.

## **Improved Operational Infrastructure**

Each element of the airside operation has been reviewed to establish the improvements and additional investment that will be required to provide the capacity for the anticipated demand to 2030.

#### **Runway**

The single runway is 1,967m long and is capable of handling the majority of civil aircraft. The principal aircraft using CoDA currently are the B737 and A320 and our Master Plan assumes that the largest aircraft likely to use the airport in the future will be up to B757. The single runway provides sufficient capacity for the forecast number of movements in the plan and there are no plans for providing an additional runway.

## **Runway Length**

The runway end safety areas and a new turning circle were constructed in 2009/2010. There are no plans for any extension of the runway unless required by future regulatory change or by aircraft change by low cost carriers.

## **Runway Category**

It is not intended to change the declared category of the aerodrome from Cat 1 which enables aircraft movements to continue unimpeded by poor visibility.



## **Aeronautical Ground Lighting (AGL)**

The majority of the AGL system was replaced with the major works between 2009-10 and now provides a fully compliant system.

The last phase of the improvement works is to install a new approach lighting system at the eastern end of the runway into the Lough and this will be completed by early 2013.

As new areas of taxiway and apron are developed, the AGL system will be expanded.



## **Navigation Aids**

The majority of the navigational aids and air traffic control systems have been replaced as part of the major works between 2009-11. The last phase is to replace the voice switch and control system and this is scheduled to be completed in early 2013.

The Visual Control Room will remain in its current location on top of the terminal building and future development will take account of the requirement to maintain sight lines to the extremities of the runway.

#### Radar

Positive radar cover for CoDA traffic cannot be provided at all the levels necessary by any of the existing radar facilities in UK or Ireland due to the shielding effect of the terrain surrounding the airport.

It is anticipated that primary and secondary radar will be provided to serve CoDA during the Master Plan period. The actual implementation date will depend on emerging regulations, demand and airline operating procedure and it will be necessary to safeguard potential radar sites, the surrounding area and radar coverage areas from development that will interfere with radar installation and to ensure that effective radar coverage can be provided in the future.

In addition to the safety benefits, a radar facility will provide greater resiliance by providing an alternative form of approach and departure and will increase the number of aircraft movements that can be handled per hour. Radar approach procedures will deliver environmental benefits in terms of lowering the noise emissions and fuel consumption of aircraft.

As part of this strategy it will be necessary to safeguard potential radar sites and radar coverage areas to ensure that effective radar coverage can be provided in the future.

CoDA has already completed a pre-feasibility study to identify a number of potential sites for a radar installation and a more detailed study will be carried out during 2013.

#### **Apron Areas**

Aprons are provided to facilitate the loading and unloading of aircraft of passengers and baggage/cargo/mail, as well as the servicing and refuelling required during a turnaround, without interfering with other traffic.

Following the partial reconstruction of the apron in 2010, the re-configured apron can accommodate up to 4 nose-in parked Boeing 737/800s.





This configuration can also accommodate aircraft types which could self-manoeuvre within the confines of the four-stand configuration. Tugs will be required to push back aircraft form the nose-in configuration.

The capacity of the apron depends on aircraft type and the schedule. A 'peaky' schedule will require more stands than a schedule spread throughout the day. Additionally, airports with 'home based' aircraft will require more stands that airports operating with 'away based' aircraft. No operators currently base commercial aircraft at CoDA.

This Master Plan assumes that over time one or two aircraft will be overnight based at CoDA, but that the majority of flights will continue on away based aircraft. Based on the likely schedule and aircraft type we forecast that a further four stands to B737-800 size will be required to meet the forecast of 1.2mppa. These will be provided to the east and west of the current apron. In addition, the apron will continue to be used for executive and air taxis, particularly those that are required to use the Security Critical Part as defined by the DfT.

### **Taxiway Alpha**

Taxiway Alpha currently links the eastern end of the apron to the eastern end of the runway. The taxiway is currently closed owing to its poor surface condition. Following an operational review the availability of two taxiways from the main apron to the runway was identified as essential. The principal advantages of this approach are:

- Reduce Runway Occupancy Times;
- Provide more than a single taxiway access to the main apron;
- Improve low visibility procedures;
- Reduce ATC controller workload; and
- Reduce the likelihood of a mid point runway incursion.

An initial phase of works will be carried out in 2013 to rehabilitate the taxiway so that it can be used for all aircraft up to large turbo-prop size e.g. ATR72 and Q400.

In the longer term, the vision for CoDA is to provide a parallel taxiway arrangement linking the eastern and western ends of the runway to the expanded apron area and this will be achieved though the construction of a new length of taxiway from the west of the apron towards the western end of the runway and the strengthening and widening of the existing length of taxiway Alpha.

## Fire Station, Fire Training and Fuel Farm

The existing fire station and fuel farm are to remain in situ. These will be expanded and/or improved as necessary in accordance with emergency regulations and guidance as the Airport capacity increases.

The fire training rig may be relocated to the northern part of the Airport in order to provide additional training space and remove an unsightly structure from direct view of passengers in the terminal building.





#### **General Aviation & Business Aviation**

CoDA is committed to expanding facilities to attract, retain and grow general aviation and business aviation in the form of air taxis, executive aviation and specialist charters.

A general and business aviation enclave will be developed in the western apron through the refurbishment of an existing hanger, provision of a new access and space for new facilities for GA business, flying schools and clubs.

The expansion of the main apron along with the proposed improvements to the terminal building will enable CoDA to promote the airport to business and executive users.

## **Ancillary**

## **Engineering & Motor Transport**

The Motor Transport workshop has recently been established within the industrial estate to the south of the terminal.

The engineering function is currently accommodated in a building to the south of the terminal. However, this will be relocated to an airside location during one of the phases of expansion to the car park, PTI and airport access road projects.

## **Fuel Farm**

The existing fuel farm will be retained in its current location and over time, additional storage tanks will be provided as demand and ATMs increase. As the GA product develops in the western apron a dedicated storage facility may be provided in this area.

## **Ground Equipment**

Areas to accommodate steps, ground power units, tugs, airfield vehicles and stores will be provided on the apron adjacent to the terminal. Some covered storage may be provided to protect the equipment from adverse weather.

An area and existing buildings to the north of the airfield will be used for long-term parking of snow and de-icing equipment.

#### **Aviation Business Park**

An area is proposed to deliver an Aviation Business Park, accessed off Clooney Road, to the south of Runway 20. This area is capable of accommodating hangar/business units with apron space for loading and unloading of aircraft.







The Business Park will provide a mix of offices and light industrial uses in close proximity to the Airport, delivering a mix of employment opportunities.

Throughout the UK, airports are regarded as being attractive for economic development in their own right. Airport locations are attractive to aviation related businesses such as manufacturers and supply companies who are direct suppliers to the aerospace industry, for which airside access is essential. They will also appeal to other time-sensitive manufacturers and distributors, particularly of high value to-weight products such as microelectronics, pharmaceuticals, digitized auto parts, medical instruments and perishables. Such businesses are key drivers for local economic development and require instant access to national and international customers and suppliers.

Some companies seek an airport location because they want easy air access, both nationally and internationally. Just as companies locate in town centres to maximise public transport links, these types of companies wish to be close to an airport, as they rely on links by air as well as land based transport.

There is substantial evidence from elsewhere in Europe, the US and Far East which shows that there are significant opportunities to promote new commercial, industrial and warehouse developments adjacent to airports. The approach to the development of airport related and associated development is in line with the need to release the potential of airports for growth and employment creation reflected in the Air Transport White Paper particularly in respect of the encouragement of economic development.

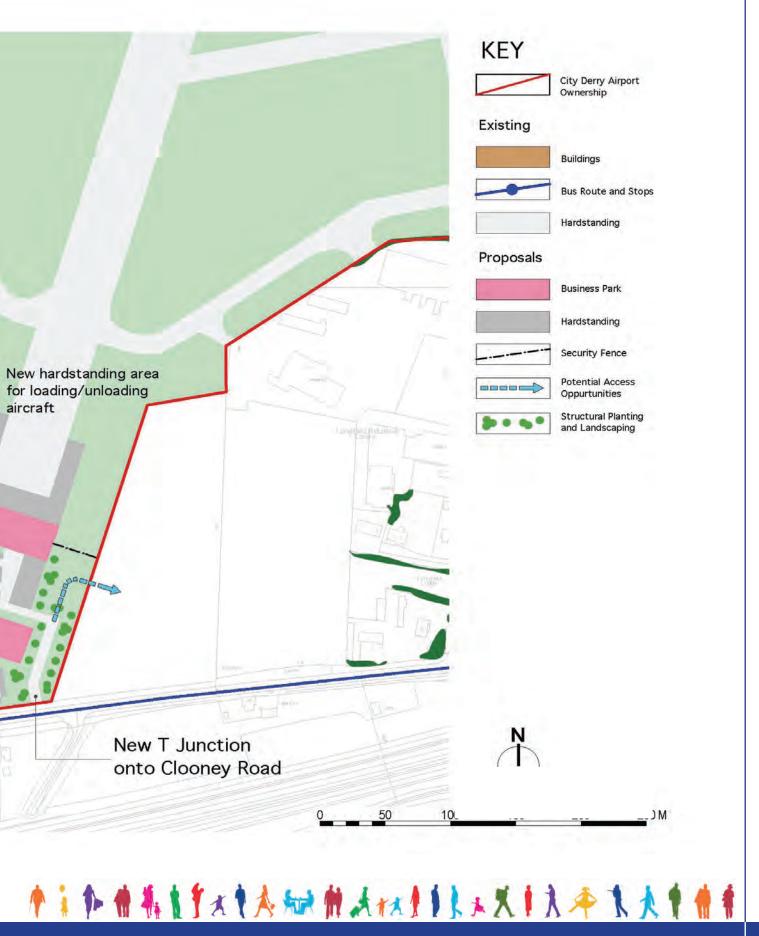
## **Public Transport**

The front of the terminal will be designed to create a focal point to an expanded terminal building. It has been laid out to accommodate the setting down and picking up of passengers by public transport including the provision of new bus stops, bus turning and a bus waiting area. Designed as a shared surface space, it is envisaged that this space will include hard and soft landscape treatments. In line with current DfT requirements, this area will be subject to controlled access.









# **Chapter 7 Airspace**

## **Controlled Airspace & Surveillance**

The UK CAA recommends that public transport flights be conducted wherever possible within controlled airspace (CAS). Airlines that chose to operate outside of CAS are required to risk assess the hazards of those operations. CAS enables the operation of aircraft engaged in regular flights to take place within an ordered and managed environment.

CAS is airspace of defined dimensions within which an air traffic control service is provided to aircraft operating within that airspace. Within CAS, aircrews are generally required to follow strict rules and ATC instructions are mandatory so that aircraft can be separated from each other. To enable this to occur, ATC need to know the whereabouts and intentions of all aircraft within the CAS. Since CAS is a 'known traffic environment' controllers can ensure that the stipulated separation minima are achieved and require knowledge of all air activity within their area of control. This is the principal role of Surveillance Radar.

Air activity can take many forms other than commercial aircraft including; general aviation, parachutists, gliders, hang gliders, paragliders, microlights, hot air balloons, airships and military aircraft all of whom can be operating legitimately in non-controlled airspace without any form of ATC or communication with other aircraft or controllers. Whilst the presence of CAS should be known to pilots, there can be no guarantee that they will not inadvertently enter CAS without permission and or without communicating with ATC. For this reason, in the UK, CAS may only be established if it is accompanied by surveillance radar. This enables controllers to manage their airspace and to provide 'deconfliction advice' if there is unexpected or uncontrolled activity within the CAS.

CoDA is the only commercial airport in the UK, and one of only a few in Europe operating public transport medium sized commercial aircraft that does not have controlled airspace or surveillance radar.

CoDA currently relies on procedural ATC techniques to control the flight of aircraft in to and out of the airport. These procedures provide a form of horizontal and vertical separation based upon time, the geography of predetermined routes or aircraft position based on ground based navigation aids. These techniques are inherently conservative, inflexible in nature and time consuming in operation. The conservative nature of the procedures will limit the number of movements into the aerodrome that a controller can handle; this limit is substantially below that which would apply to CAS where surveillance systems can reduce separation and maximise the use of the airspace.

## **CoDA Airspace**

CoDA is unique amongst airports in the UK in that it is regulated by both the UK Civil Aviation Authority and the Irish Aviation Authority. Airspace policy for the two regulatory bodies differs. The Irish Authority requires that all airports operating for the public transport of passengers are provided with controlled airspace in the approach to airports for the protection of these passengers, but the provision of radar surveillance in that airspace is not a requirement. The UK Civil Aviation Authority will not allow controlled airspace on the approach without surveillance radar.

To meet the requirements of the Irish Aviation Authority, controlled airspace (Class C) has been introduced in the Shannon Flight Information Region adjacent to the CoDA instrument approach to runway 08. Aircraft operating within that airspace are provided with an Air Traffic Control Service by CODA.

The airspace governed by UK regulation within which CoDA provides a service remains uncontrolled (i.e. Class G). However CODA continues to provide the range of ATC services as listed in CAP774 and actively encourages airspace users to contact CoDA when operating in the local area.

The UK has a complex airspace structure to support an extensive network of arrival and departure routes with the interaction of various airports having an impact in the capacity in the surrounding airspace.



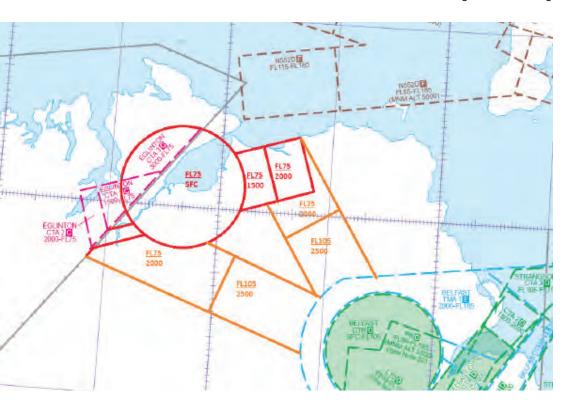


CoDA continually reviews the designation of airspace around the airport to ensure that it meets the safety needs generated by the growth in its commercial traffic. As traffic grows at CoDA and other forms of aviation operating in the local area increase it will become necessary for CoDA to introduce CAS to manage arriving and departing aircraft and to enable control of other forms of aeronautical activity. To achieve this will require some form of surveillance of the airspace and consequently, it is CODA's intention to introduce radar surveillance during the life time of this plan.

Work has yet to commence on the design of controlled airspace to CoDA, but it is likely that it will become Class D airspace with CoDA having control of airspace to 15 miles from the airport and aligned with the runway centreline. The plan below illustrates an indicative CAS area.

## **Airspace Surveillance Systems**

There has been a rapid development of wind farms throughout the UK, particularly in westerly locations such as the northwest of Ireland where wind conditions are more favourable. The presence of wind farms close to airports can interfere with airspace surveillance. For this reason planning requirements extend airport technical safeguarding to at least a 30km radius from the aerodrome. As stated in CAP764 the distance can be far greater than 30km depending on a number of factors and the suggested radii are for initial guidance purposes only. In addition technical safeguarding is carried out in airspace coincidental with any published Instrument Flight Procedure. It is essential that wind turbine developments do not occur on sites that may degrade the performance of the future radar surveillance systems at CoDA. CoDA will work closely with the planning authorities to ensure that the future growth, and ability of the airport to contribute to economic growth in the region, is protected.





# **Chapter 8 Surface Access**

## **Background**

In 2003, the White Paper on Aviation set out an objective of reducing the overall mileage and volume of surface access journeys in the UK. The growing unease at airport related congestion and associated environmental impacts has led to an increase in the importance of promoting alternative modes of travel to airports.

CoDA is an important facility within the region, including the Republic of Ireland, where a significant proportion of the airport's passengers originate. Therefore the future of the airport is of interest to both the Northern Ireland authorities and the Government of the Republic of Ireland

The Airport's proximity to Derry and the strategic links to the A2, A6 and the A5 provide good routes to all key destinations in the locality.

The future implementation of an integrated, multimodal Airport Surface Access Strategy (ASAS) will be essential to support and sustain the forecast growth in activity at CoDA.

## **Existing Conditions**

## **Local Highway Network & Motorways**

CoDA is located to the north of the A2 Clooney Road, the road to the west to Londonderry/Derry has been recently upgraded to dual carriageway and to the east a single carriageway trunk road links the airport to Limavady. Good surface links are key to enable the airport to accommodate 1.2 mppa by 2019.

Access to the main airport terminal is via a roundabout from the A2 into the landside access roads and car parks. There is also access to the flying school which is accessed from Airfield Road, which provides direct access to the airside roads for emergency vehicles and for those arriving for private general aviation flights.

## **Vehicle Parking**

There are currently 650 car parking spaces for passengers, visitors, staff and car hire on site, all of which are managed directly by CoDA. There are also areas for car hire 'pick up and return' and for taxi and coach parking.

## **Modal Split**

As part of the background work for the Master Plan, a travel survey of passengers and employees has been undertaken. A summary of the results is presented below, with more detailed results contained in the Baseline Report.

Table 8.1 shows the baseline travel modes. The majority of passengers and employees currently travel by private car, with only limited numbers arriving by alternative modes.

Table 8.1 2009 Modal Split – Passengers, Visitors and Employees:

| Mode   | Employees | Passengers<br>/ Visitors |
|--|-----------|--------------------------|
| Private Car  | 96%       | 75%                      |
| Public Transport<br>(including cycling<br>and walking) | 0%        | 7%                       |
| Taxi/Private Hire                                      | 4%        | 12%                      |
| Hire Car   | 0%        | 6%                       |
| Total  | 100%      | 100%                     |

Source – City of Derry Airport Environmental Baseline Report





#### **Alternative Modes**

## **Public Transport**

Whilst currently there are only a relatively few people using the bus services to access the Airport, it would be reasonable to expect this to rise as passenger numbers increase. Currently Translink operates a regular bus service to the airport as a stop off on their services 143 and 144 (an hourly service from 07.15 to 18.45) from Londonderry/Derry to Limavady and the 234 which provides a service every two hours to Coleraine. During 2012 Airporter introduced a dedicated airport only service from the airport to their depot in Londonderry/Derry.

The recent travel surveys have revealed that increased journeys by bus is likely to be the most successful in increasing sustainable journeys to the airport.

There are also few passenger or employee journeys undertaken by coach, although these services do offer access to a wider area than the local bus services.

CoDA is located approximately 13km from the nearest railway station in Londonderry/Derry, where services towards Belfast are available. It is assumed these multi-modal trips involving arriving at the City by train and then a bus/taxi to the airport. Whilst the railway line passes close to the airport, any station would nevertheless be some distance from the airport terminal. It is unlikely that even if the forecast number of passengers are achieved that rail mode of access will be economically viable.

#### Taxi/Private Hire

A significant number of people use taxis to/from the Airport, especially inbound passengers. This accounts for 12% of journeys.

## Walking/Cycling

Although infrastructure is in place, there are few people walking or cycling to the Airport due to its 'remoteness' from urban conurbations.

With regard to passengers, this is understandable given the location of CoDA and the need for luggage. However, this is an area that can be targeted for staff travel.

### **2019 Surface Access Conditions**

## **Local Highway Network/Motorways**

As the Airport continues to grow, changes to the internal road layout and parking arrangements will be required. It is also important that operational requirements are met, i.e. landside and airside access points, emergency airfield operations and access to the general aviation centre.

## **Vehicle Parking**

Table 8.2 sets out the type and quantum of parking that is likely to be required by 2019 or for 1.114mppa.

Table 8.2 2019 Car Park Provision:

| Car Parking Provision | Number of Spaces |
|-----------------------|------------------|
| Rapid Drop Off        | 30               |
| Short Stay            | 400              |
| Long Stay             | 696              |
| Employee              | 154              |
| Total                 | 1450             |

Source – City of Derry Airport Environmental Baseline Report

It is likely that to meet the increased demand, car parking will be expanded into land adjacent to the existing airport site. This is outside of CoDA's control and would be subject to Local Planning Authority policies.



CoDA believes there is a need for local planning authorities to protect consumers by adopting a policy which encourages all parking to be at the airport. CoDA considers that it is the most environmentally acceptable solution to encourage airport parking and to discourage off airport parking that results in often unlicensed and non-approved car parks and avoids passengers driving past the airport to an offsite car park and then being driven back by coach.

It is CoDA's aim to encourage employees to travel by sustainable modes where possible. Whilst overall demand for car parking is expected to increase over the life of this Master Plan, CoDA will seek to implement measures to encourage the use of alternative modes of transport.

## 2019 Forecast Modal Split

The forecast modal split in 2019 is shown in Table 8.3.

Table 8.3 2019 Modal Split – Passengers, Visitors and Employees

| Mode   | Employees | Passengers<br>/ Visitors |
|--|-----------|--------------------------|
| Private Car  | 86%       | 65%                      |
| Public Transport<br>(including cycling<br>and walking) | 11%       | 15%                      |
| Taxi/Private Hire                                      | 3%        | 10%                      |
| Hire Car   | 0%        | 10%                      |
| Total  | 100%      | 100%                     |

## **Measures to achieve Modal Shift**

CoDA is committed to working with their transport partners to achieve a modal shift in passenger travel habits to increase the proportion of passengers accessing the Airport by public transport. In liaison with local stakeholders and transport providers, CoDA will investigate a range measures to enhance the attractiveness of public transport.

CoDA is also committed to introducing measures to encourage a modal shift for staff at the airport. CoDA will look to introduce a staff travel plan and promote the use of sustainable travel modes, whilst recognising that there are a number of staff who are required to work shifts or unsociable hours.

## **Employee Travel**

The Airport Authority recognises that active promotion of sustainable travel is an important part of the overall Airport Travel Plan and it will work with the Local Authority as well as national schemes, such as TravelWise Northern Ireland.

Many passengers make only occasional trips to the Airport and it is more difficult to influence travel choices. It is, however, possible to influence the travel habits of employees making regular journeys and to promote more sustainable travel modes.

### **Alternative Modes**

#### **Public Transport**

The passenger surveys have highlighted bus use as the most desirable alternative to the private car. Local bus services are therefore seen as having the most potential to encourage people to travel by sustainable modes. The attractiveness of coach travel is also expected to increase as airport passenger numbers rise. This has been a consideration in the development of this Master Plan.

In the short term, a railway halt at CoDA is unlikely to be viable however, as a long term objective, this is included in the Master Plan. An indicative location for a potential rail link has therefore been identified should it be become economically and operationally feasible in the future (as shown in Figure 8.1).





## **Taxi/Private Hire**

It is probable that taxis will continue to be a popular mode of travel to/from CoDA, especially for arriving passengers. Future planning will ensure that taxis and private hire vehicles continue to be easily accessible from the terminal buildings.

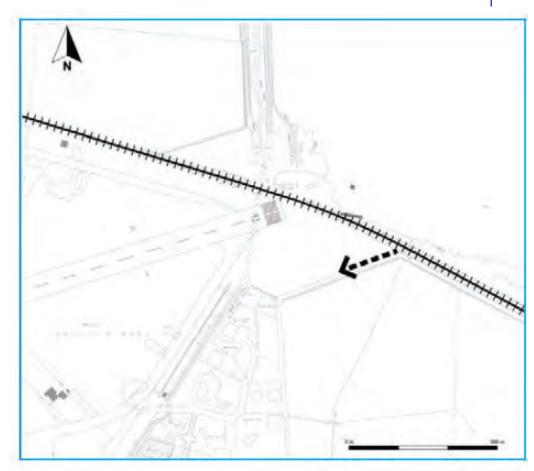
## Walking/Cycling

Typical of many airports, the site is some distance from neighbouring residential areas. As such it is unlikely that pedestrian trips to the airport will increase (currently 1%). Pedestrian movements within the site are however critical to the successful operation of the Airport such as footways and pedestrian priority junctions, linking the terminal to car parks, drop off areas and bus stops.

## **Motorised On Site Transport**

Due to the compact layout of CoDA, it is unlikely that motorised on site transport will be required apart from that reserved for mobility impaired visitors/employees. However, should this situation change, provision will be made following discussion with the relevant bodies.

Figure 8.1: Preferred Rail Link Location





# **Chapter 9 Impacts and Mitigation**

#### Introduction

An environmental appraisal of the proposed development of CoDA will be a key tool to help predict potential environmental issues at an early stage and to enable the overall environmental footprint of the Airport's development to be minimised. The information will help to enhance the potential to realise environmental gains and to develop opportunities for management and mitigation of any impacts.

This section provides a summary of the key environmental issues and how they have been addressed. More detailed information can be found in the Baseline Report which was provided for the purpose of setting out the known environmental constraints and opportunities associated with CoDA. The baseline related to land which lies in the perimeter of the airport as well as the wider context and provided information on:

- Archeology & cultural heritage;
- Biodiversity;
- Landscape & visual;
- Noise:
- Transport; and
- · Water related environmental.

The environmental topics considered by the environmental appraisal of the Master Plan include:

- Air Quality:
- Noise;
- Transport;
- Biodiversity;
- · Landscape and Visual;
- Cultural heritage;
- Water Environment;
- · Geology and groundwater; and
- Economic impacts.

## **Air Quality**

Developments related to the Master Plan may potentially affect emissions from the following sources:

- · Airport operations; and
- Road vehicle exhausts.

Over the Master Plan period there is expected to be an increase in both average aircraft size and number of flights. However, given the improvements in aircraft technology it is likely that any change in emissions will not be proportional to the increase in activity. Indeed, despite the projected increase in future aircraft movements within the plan period, annual emission totals are still expected to be less than in recent years, due to increases in average aircraft size and improvements in aircraft technology.

During the plan period it is anticipated that there will be greater traffic volumes generated around the Airport site, which may have some impact upon the volume of emissions from this source. However, CoDA plans to mitigate this by improving public transport access to and from the airport, integrating improved road access design and car parks. We will also be investigating the potential for a 'greener' vehicle fleet in the future across all tenants operating at the airport.

Derry City Council has declared one Air Quality Management Area (AQMA) for Nitrogen Oxide (NO) within the centre of Derry City, approximately 11km to the west of the airport. Within the constituency of Limavady Borough Council, an AQMA has also been declared in the town of Dungiven, approximately 18km to the south east of the airport. There are no AQMAs encompassing the airport or in close proximity.

The results taken from an air quality monitoring station located in Derry City show that there are no exceedances of any of the Air Quality Objectives (AQOs) in this area for human health or ecological sites. This monitoring station however is not directly representative of the area around CoDA as the Airport is located in a more rural location.





The National Environmental Technology Centre (NETCEN) shows that estimated background concentrations of NO, Nitrogen Dioxide (NO $_2$ ), Particulates (PM10), Sulphur Dioxide (SO $_2$ ) and Carbon Dioxide (CO $_2$ ) in the local area is well below the relevant AQOs.

The potential air quality effects on the designated nature conservation sites, including the Lough Foyle Ramsar site, Special Protection Area (SPA) and Areas of Special Scientific Interest (ASSI) and the River Faughan and Tributaries ASSI and candidate Special Area of Conservation (cSAC), will need to be assessed in more detail in line with the Conservation (Natural Habitats) Regulations (Northern Ireland) 1995. This assessment will be carried out in consultation with the Northern Ireland Environment Agency (NIEA).

## **Noise**

An increase in Air Traffic Movements (ATMs) will be responsible for increasing air noise levels. Increases in the number of large jet aircraft (such as the RyanAir Boeing 737-800s) will be a major factor on air noise levels, in particular at locations at either end of the main runway.

The main runway (26-08) has arrival and departure routes which over fly locations such as Carrakeel and Clogholl to the west and Lough Foyle to east. There are several isolated residential dwellings and farms located around the airport including a single residential dwelling which overlooks Taxiway Echo. There is also a number of dwellings approximately 150m from the end of Runway 26-08 on Donnybrewer Road. These locations are most likely to be effected by increased noise levels due to increased ATMs and increases in short haul large jet aircraft.

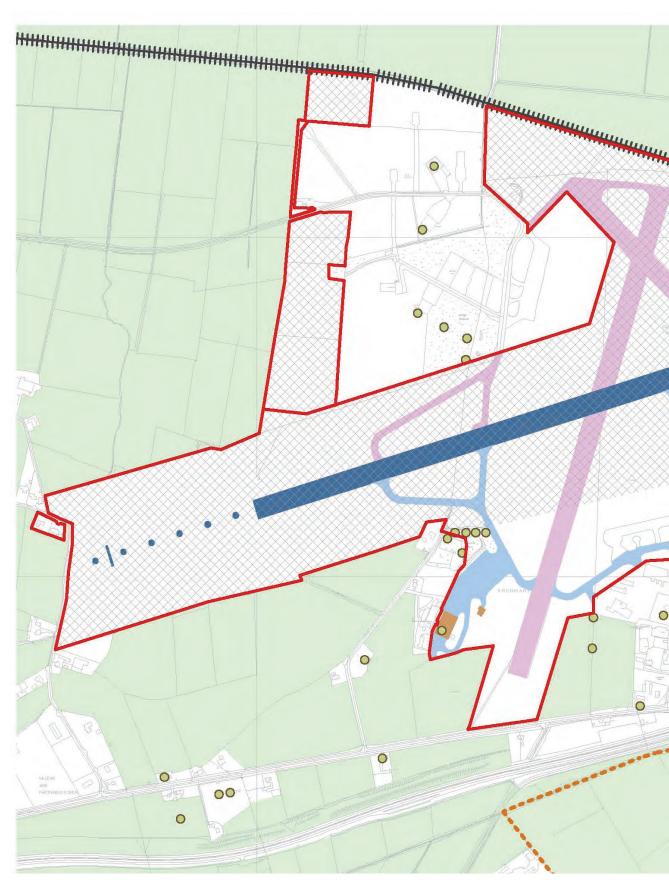
To the south of the terminal several residential dwellings and a nursing home are located on Longfield Road. It is likely that noise at these locations will be influenced by airport activities, as well as nearby commercial units and road traffic on the A2. It is also noted that several residential dwellings are located to the south of the Airport and overlook the A2. These receptors range between 150m and 400m from the apron. These receptors are likely to be influenced by increases in ground noise activity, changes in road traffic noise as well as changes in air noise due to the increased ATMs.

Baseline noise monitoring and noise modelling will be undertaken to capture the existing noise baseline data and to identify the impacts of air traffic growth as part of any future planning application for airport expansion. If required, operational procedures will be introduced to minimise the impact of additional noise.

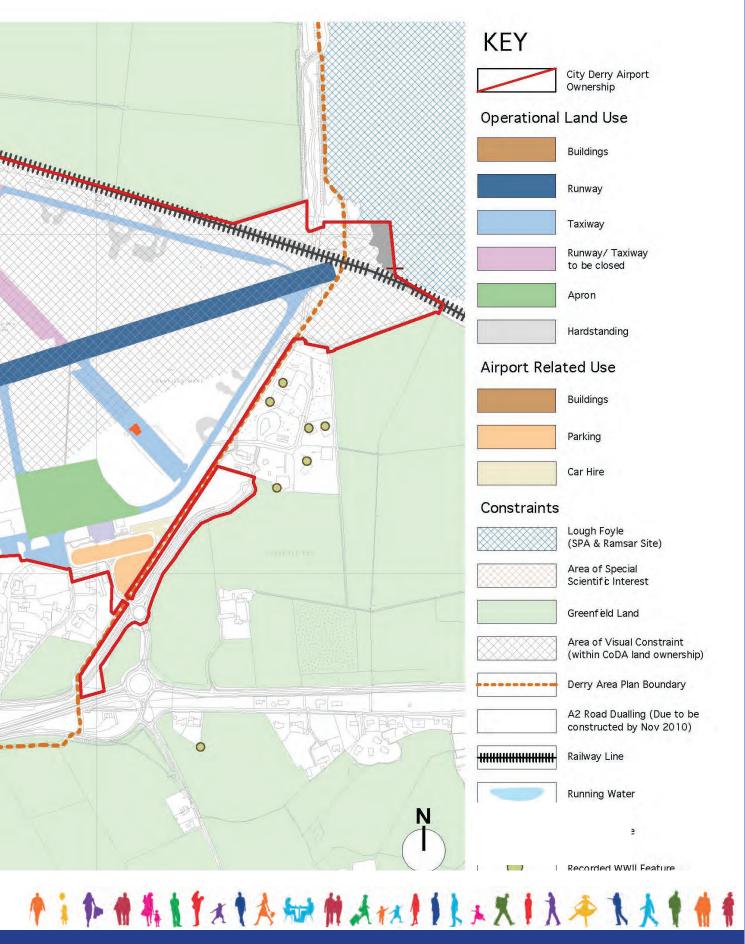


The effect of noise on receptors due to the increase in air traffic movements, vehicles movements, including traffic and car parking will also need to be investigated. The effect on road traffic noise due to increased traffic volumes on the A2 and the wider road network will be factored into the modelling.









## **Biodiversity**

There are no statutory designated sites of nature conservation importance within the land occupied by the Airport. The habitats present in and around the boundary of the site are 'semi-natural' and have been heavily influenced by management, such as mowing, scrub clearance, and land use/agricultural practices. However, the Lough Foyle Area of Special Scientific Interest (ASSI), Lough Foyle Special Protection Area (SPA) and Lough Foyle Ramsar Site statutory designated sites which directly border the Airport to the north. The Lough is of particular nature conservation importance due to the wintering, wader and migratory bird populations. Approximately 4.5km to the southwest of the site is the River Faughan and Tributaries, ASSI and the River Faughan candidate Special Area of Conservation (cSAC). This area supports habitats and species which are rare and threatened in both a national and international context.

Any development of the Airport will include measures to protect existing and, where possible, create new habitats within the Airport boundary. The retention and enhancement of key hedgerows and tree cover throughout the Airport will be encouraged where hedgerows and tree cover do not impinge safety critical slopes and do not encourage bird activity detrimental to the safe operation of the airport.

The close proximity of the Lough Foyle Ramsar site, SPA and the ASSI needs careful consideration. It is important that the environmental effects on these designations caused by the increase in flight numbers, the associated increase in noise disturbance and the potential impact on local air quality is carefully monitored and mitigated. These potential impacts will need to be verified by further specialist survey work, as part of a future planning application for airport expansion and appropriately mitigated to comply with relevant wildlife and planning legislation. Any assessment work will be undertaken in consultation with the Northern Ireland Environment Agency (NIEA).

## **Landscape and Visual Appraisal**

The site is located within a flat open landscape comprising features of the existing Airport, such as the runway, areas of tarmac and large areas of rough grassland surrounding the Airport features. The site also comprises existing airport terminal buildings and car parking area within the south eastern part of the site and hangars associated with the on site fire service and flight school in the southern part of the site. Within the wider context, the local landscape outside of the site comprises a number of different uses including industrial, residential and agricultural land.





A landscape character assessment, undertaken by NIEA, has divided the area (the Airport and surrounding areas) into a number of small character areas. According to the assessment the Airport is located within the 'Lough Foyle Alluvial Plain' (Area 33) which is characterised as a flat, alluvial landscape. To the west of this character area lies the 'Derry Slopes' Character Area (Area 32), to the southeast lies the 'Roe Basin' Character Area (Area 37) and to the south is the 'Loughemore Hills' (Area 34) Character area.

As part of the future development, the design of expansion to the Airport will need to consider the need to protect and enhance the existing landscape character, views and visual amenity of the surrounding area. Building designs will minimise potential visual effects on people living, working and travelling through the area. Where required, new strategic landscaping will be created to maintain and enhance the visual characteristics of the area. This significant, new strategic planting, along with more detailed landscaping around the terminal and new car parking areas will combine to create an enhanced environment. The long-term management of key landscape features will be ensured through the adoption of an airport-wide landscape strategy.

The largely undeveloped area to the north of the Airport will be retained by concentrating future development within the existing built form on the south side of the airfield. This will assist in conserving the character of the landscape and preserve the existing long distance views from the north, north east and north west of Lough Foyle. Key landscape features, such as the grassland vegetation associated with the character of the edge of the Lough boundary, and along the northern boundary of the site will be retained.

Due to the increase in infrastructure at the Airport, lighting requirements are likely to increase which will have an impact on the visual amenity during the evening. Key design guides and measures for minimising light pollution will be used including the development of an airport-wide lighting strategy.

## **Archaeology and Cultural Heritage**

There are no designated cultural heritage features on the site or within 500m of the Airport. The nearest designated feature is a scheduled monument located over 1km to the south of the site in Eglinton. This is recorded as the remains of a plantation village founded in 1615. There are also a number of scheduled monuments on higher ground to the south, although these are located at a distance of 5km, and further away from the Airport.

A number of non-designated features are recorded on the Northern Ireland Sites and Monuments Record (NISMR) database, and the Northern Ireland Industrial Heritage Record (IHR) database within 500m of the site. Features recorded within the site include a number of World War I features. A number of WWII features relating to the former Royal Air Force (RAF) Eglinton and/or the Royal Naval Air Station, were recorded during the Defence Heritage Project (DHP) (Northern Ireland), although the majority of these lie outside the site boundary. As within any site, there is some potential for further cultural heritage features to survive which have not previously been identified or recorded.

In order to minimise the impact of any of the future developments on cultural heritage in the area, CoDA will initiate discussions with the DOE Environment and Heritage Service to establish the need for the preparation of an archaeological strategy. This would include the pre-development assessment requirement for each of the development zones, which may incorporate geophysical surveys, test excavations, and topsoil stripping monitoring, if required.



#### **Water Environment**

The CoDA lies within the North Western International River Basin District. The river basin extends over the boundary also covering the Republic of Ireland, to the Western coast beyond Donegal, and South to Longford. As this crosses the borders into the Republic of Ireland, it is assigned to an International River Basin District.

The major river in the area is the Foyle which flows through Derry into Lough Foyle. To the west of the Airport the River Faughan drains into Lough Foyle. However, more locally to the Airport, the Muff River drains into the Lough, flowing along the eastern perimeter of the Airport site.

Lough Foyle is situated on the north coast of Northern Ireland, immediately downstream and extending to the north-east of the city of Derry. The site comprises of a large shallow sea lough which includes the estuaries of the rivers Foyle, Faughan and Roe. The site contains extensive intertidal areas of mudflats and sandflats, saltmarsh and associated brackish ditches.

With the proposed development and increase in passenger numbers at the Airport there are potential issues regarding surface and groundwater which will need to be mitigated or treated appropriately as the detailed design emerges, namely:

- · Possible increased use of de-icing agents;
- Possible increased mains water usage; and
- Possible increase in the amount of chemical storage.

## **Waste Management**

As passenger numbers increase so will the waste generated from the terminal. The potential light industrial, warehousing and business uses and associated services will introduce new sources of waste. It is not envisaged that the amount of additional waste generated will be significantly different to that currently generated within the Airport complex, and it is proposed that waste from additional passengers will be dealt with sufficiently under the Airport's existing Waste Management Policy.

CoDA will, however, continually re-evaluate its waste management practices and will look to incorporate an approach involving all operations on the site, and with a view to reduce, reuse and recycle where appropriate.

# The role of CoDA in Regional Economic Growth

CoDA is an important asset and catalyst to the economic prosperity of Derry and the wider regional economy. In this regard, the Derry Economic Development Strategy identifies the need to intensify the use of CoDA in order to enhance the city's national and international market position and support the development of Derry as the key strategic employment location for the North West region and the main focus of the North-West Development Corridor between Coleraine and Letterkenny in the Irish Republic.

The Airport also has an important role in supporting tourism. According to the Tourism Development Strategy for Derry 2009-2012, Focus on the Future, in 2008 the tourism sector generated approximately £30 million for the city's economy and is targeted to grow at a rate of 6% per annum. The Strategy states that the Airport is a vital asset in achieving growth in the sector and in this respect its expansion is viewed as a priority.

Aviation is a major contributor to UK economic growth. It is estimated to directly support 185,900 jobs in the UK economy and around £11.2 billion of Gross Value Added (GVA). When indirect and induced effects are also included these figures rise to nearly 580,000 jobs and £22.2 billion of GVA.

Whilst it is a major employment generator in its own right, an important additional economic contribution of air transport is through its impact on other industries and as a facilitator for their growth. The Government's White Paper on the Future of Air Transport recognises that airports are contributors to the development of local and regional economies, stating that they:

'attract business, generate employment and open up wider markets. They can provide an important impetus to regeneration and a focus for new commercial and industrial development'.





Based upon these GVA per employee values, it is estimated that CoDA currently contributes £7 million to the regional economy from direct jobs and a further £7 million GVA resulting from local indirect and induced jobs. In total therefore, CoDA currently contributes over £14 million to the north west economy.

It is estimated that by 2022 CoDA will contribute £34 million to regional GVA.

Employment and other benefits generated by the Airport can be considered in the following four categories:

Direct Employees - are those employed on site at the airport. They include those employed by the airlines, shops and other concessions, catering, ground engineering and handling, air traffic control and car parking facilities, and several other business activities.

Indirect Employees - are those employed in organisations and companies off-site supplying goods and services to the Airport - including all goods and services that airport-based companies need to purchase in order to carry out their work.

Induced Employment - refers to employment generated by the spending of wages and salaries earned by employees in the direct and indirect activities.

Catalytic - employment and income generated in the region by the wider role of the airport in attracting economic activities, such as inward investment and inbound tourism.

Overall the airport currently supports 380.8 FTEs in 2011 as summarised in the table below:

|               | Gross<br>Impact | Local<br>Impact |
|---------------|-----------------|-----------------|
| Direct FTEs   | 195.3           | 124.8           |
| Indirect FTEs | 97.6            | 9.8             |
| Induced FTEs  | 87.9            | 40.4            |
| Total         | 380.8           | 174.9           |

Gross Value Added (GVA) represents the contribution of producers/businesses to the economy.

In order to estimate the GVA generated by jobs dependant on the City of Derry Airport the calculation applies data per GVA job figure for Northern Ireland in 2008

The summary of GVA impacts is provided in the Table below:

|              | Gross GVA | Local GVA |
|--------------|-----------|-----------|
| Direct GVA   | £7.361    | £4.703    |
| Indirect GVA | £3.681    | £0.368    |
| Induced GVA  | £3.313    | £1.521    |
| Total        | £14.355   | £6.592    |

CoDA generated around £14.4 million GVA into the Northern Ireland's and wider economy in 2011, of which approximately £6.6 million was generated in the north



## **Projected Employment**

Based on the above assumptions the direct employment related to the City of Derry Airport will double by 2021. The growth will happen mainly at the airlines and on-site businesses due to the increased volume of passengers served by the Airport.

|                       | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2021  |
|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Airlines              | 49.3  | 45.8  | 66.2  | 55.8  | 63.1  | 67.2  | 70.4  | 85.2  | 88.9  | 92.8  | 97.0  |
| Airport               | 98    | 98    | 104   | 104   | 119   | 126   | 132   | 148   | 154   | 170   | 189   |
| On-site<br>businesses | 37.0  | 39.7  | 54.0  | 54.1  | 50.9  | 62.5  | 72.1  | 78.8  | 91.2  | 105.3 | 107.9 |
| Construction          | 10.9  | 12.6  | 12.6  | 12.6  | 12.6  | 12.6  | 12.6  | 12.6  | 12.6  | 2.3   | 2.0   |
| Total                 | 195.3 | 196.1 | 236.8 | 226.5 | 245.6 | 268.3 | 287.1 | 324.6 | 346.7 | 370.4 | 395.9 |

## **Projected GVA**

As discussed earlier in this section the GVA per worker has been projected to 2021. The resulting estimates are as follows:

|          | 2011    | 2012    | 2015    | 2018    | 2021    |
|----------|---------|---------|---------|---------|---------|
| Direct   | £7,361  | £7,302  | £9,717  | £13,862 | £17,823 |
| Indirect | £3,681  | £3,651  | £4,858  | £6,931  | £8,912  |
| Induced  | £3,313  | £3,286  | £4,372  | £6,238  | £8,020  |
| Total    | £14,355 | £14,239 | £18,947 | £27,031 | £34,755 |

The GVA generated by the City of Derry Airport locally is projected to increase to £8.5 million in 2015 and then to £15.6 million in 2021:

|          | 2011   | 2012   | 2015   | 2018    | 2021    |
|----------|--------|--------|--------|---------|---------|
| Direct   | £4.703 | £4.775 | £6.093 | £8.521  | £11.125 |
| Indirect | £0.368 | £0.365 | £0.486 | £0.693  | £0.891  |
| Induced  | £1.521 | £1.542 | £1.974 | £2.764  | £3.605  |
| Total    | £6.592 | £6.683 | £8.553 | £11.978 | £15.621 |







## **Catalytic and Other Impacts**

Catalytic impacts of airports include:

- Inward investment, as airports help to attract air-intensive local and international businesses, which require convenient locations close to major transport hubs;
- Wider impact on surrounding service businesses, e.g. accommodation providers, taxi companies, convenience shops and supermarkets, and others: and
- Inbound tourism because regional airports can open up locations previously inaccessible for some of the tourists who would before visit the main international hub city only and its immediate vicinities. Air travel has been one of the main drivers behind the increase in tourism worldwide, and this trend is expected to continue. Inbound tourism impact of airports are usually significant.

## **Direct User Benefits**

Direct user benefits generated by an airport include benefits to passengers whose travel to the airport times are reduced by the presence of that particular airport, benefits accrued to airport operators, and benefits accrued to the Government through the Air Passenger Duty (APD). It is not possible to provide quantified estimates of these benefits within the limits of this study, however they are significant and cannot be ignored.





## **Chapter 10**

## Safeguarding, Risk Assessment & Land Acquisition

## **Safeguarding**

The safe operation of CoDA and aircraft that use it is of over riding importance. This affects the operation of CoDA in a number of ways. The airport regularly reviews safeguarding measures that seek to protect flight paths and airspace around the Airport from potential hazards. It undertakes risk assessments of all operational activities in accordance with regulatory requirements. All of these aspects have been taken into account in the generation of this Master Plan.

CoDA is a safeguarded airport meaning that it must be consulted on proposals that may lead to an increased chance of aircraft enduring bird strikes or tall structures that could effect aircraft movements.

Civil airports, selected on the basis of their importance to the national air transport system, are therefore officially safeguarded in order to ensure their operation and development are not inhibited by buildings, structures, erections or works which infringe protected surfaces, obscure runway approach lights or have potential to impair the performance of aerodrome navigation aids, radio aids or telecommunications systems; by lighting which has the potential to distract pilots, or by developments which have the potential to increase the number of birds or bird hazard risk.

The safeguarded area extends for a radius of 15km from the centre point of the aerodrome. Any development of the above type which falls into the 15km safeguarded area must be notified to the Airport Authority.

An extended safeguarding area has been established for wind turbine development. This area is a 30km radius from the aerodrome.

The planning authorities will ensure all such applications are presented to CoDA for their consideration. CoDA has the power to accept, reject or request modification to any such application.

In addition to the ongoing checks on planning applications, CoDA arranges for an annual survey of all protected surfaces. Civil Aviation Authority policy on wind turbines is found in CAP 764. CoDA follows the guidelines laid down by this publication.

The circular also identifies the requirement for local planning authorities to consult an airport operator for development that may affect aerodrome safeguarding. It identifies at paragraph 28 that development plans should include a policy stating that officially safeguarded areas have been established for a particular airport, that certain planning applications will be the subject of consultation with the operator of that aerodrome, and that there may be restrictions on the height or detailed design of buildings or on development that may create a bird hazard.

The circular further advises local planning authorities that the outer boundaries of safeguarded areas should also be shown on proposals maps.

As it is likely that CoDA will in the future introduce surveillance radar, the airport will through safeguarding seek to protect the radar installation from structures that may have an adverse operational effect on radar surveillance.

## **Public Safety Zones**

Public Safety Zones (PSZ) are areas of land at the ends of the runway within which development is restricted in order to control the number of people on the ground at risk in the event of an aircraft accident on take off or landing. The policy objective governing the restriction on development near to civil airports is that there should be no increase in the number of people living, working or congregating in the PSZ and that over time, the number should if possible be reduced.

The DfT/CAA have not declared PSZs at CoDA.





## Land

The majority of proposals in the Master Plan can be developed on land currently owned by Derry City Council. However a nominal amount of land and property owned by other individuals will be required to the south of the terminal building.

In developing this plan CoDA has developed a land use survey and determine a that a number of parcels of land to the north of the airport are not required as indicated below:

However, given the relatively low land value and the likelihood that it would be difficult to find a tenant/ operator, it has been concluded that CoDA/DCC will retain this land which may ultimately be used for carbon offset.

Where further land may be required and acquisition by agreement is not practicable, or cannot be reached on acceptable terms, the Airport and the Department for Regional Development, do have powers of compulsory acquisition. However, there is a set procedure that must be followed and compulsory purchase is always subject to Ministerial confirmation.

For the property needed exclusively for airport facilities other than roads, the Airport would be responsible for the compulsory purchase procedures.

The Airport's powers of compulsory purchase, for any purpose connected with the performance of its functions, are enshired in the Airports Act 1986 and the Civil Aviation Act 1982.





# **Chapter 11 Glossary**

| Abbreviation         | Term  |
|----------------------|---|
| Aer Aran             | Irish based airline   |
| AGL                  | Aeronautical Ground Lighting  |
| AQMA                 | Air Quality Management Area   |
| AQOs                 | Air Quality Objectives  |
| ASAS                 | Airport Surface Access<br>Strategy  |
| ASSI                 | Area of Special Scientific Interest   |
| ATC                  | Air Traffic Control   |
| ATM                  | Air Traffic Movement  |
| ATZ                  | Aerodrome Traffic Zone  |
| CAA                  | Civil Aviation Authority  |
| Chartered<br>Flights | Non-scheduled flights, chartered for a specific journey, largely as part of a holiday package |
| CoDA                 | City of Derry Airport   |
| CPNI                 | Centre for Protection of<br>National Infrastructure   |
| cSAC                 | Candidate Special Area of Conservation  |
| CTZ                  | Control Zone  |
| DAP                  | Director of Airspace Policy   |
| DCC                  | Derry City Council  |
| DETI                 | Department of Enterprise, Trade and Investment  |
| DfT                  | Department for Transport  |
| DfT Transec          | Department for Transport's<br>Security Division   |
| DHP                  | Defence Heritage Project  |
| DOE                  | Department of Environment   |
| DRD                  | Department for Regional<br>Development  |
| EU                   | European Union  |
| FDI                  | Foreign Direct Investment   |

| Abbreviation | Term  |
|--------------|---|
| FIR          | Flight Information Region                       |
| GDP          | Gross Domestic Product                          |
| GVA          | Gross Value Added                               |
| IATA         | International Air Transport Association         |
| ICAO         | International Civil Aviation<br>Organisation    |
| IHR          | Northern Ireland Industrial<br>Heritage Record  |
| mppa         | Million passengers per annum                    |
| NETCEN       | National Environmental<br>Technology Centre     |
| NIEA         | Northern Ireland Environment<br>Agency          |
| NISMR        | Northern Ireland Sites and<br>Monuments Record  |
| PPS          | Planning Policy Statement                       |
| PSRNI        | Planning Strategy for Rural<br>Northern Ireland |
| PSZ          | Public Safety Zone                              |
| RAF          | Royal Air Force                                 |
| RDS          | Regional Development Strategy                   |
| RPA          | Review of Public Administration                 |
| SA           | Sustainability Appraisal                        |
| SPA          | Special Protection Area                         |





## Chapter 12

## **Next Steps for Consultation**

The proposals included within this Master Plan are strategic and largely outline in detail. They have been developed without formal discussion with various statutory bodies such as DfT Transec, CAA, or the Centre for Protection of National Infrastructure (CPNI). Early discussions with these bodies will be undertaken prior to the development of detailed proposals, including the preparation of any planning applications, to ensure that appropriate regulations, policy and guidelines are complied with at all stages of development.

CoDA would like to engage with the Northern Ireland Planning Service post completion of the Master Plan to explore how this document can be integrated into, and implemented through the planning system. We are keen for the Master Plan to be translated into action and form part of the evidence base for future plan making.

CoDA's Draft Master Plan is issued for public consultation for a period of three months from launch in November 2012. Responses must be received by 31st January 2013. Copies of the Draft Master Plan and accompanying documents are available to download from the Airport's website.

A summary document of CoDA's Draft Plan is available from CoDA's Information Desk during the consultation period and a copy of the Draft Master Plan may also be viewed at this location.

A large format print version of the Draft Master Plan will be available on request to:

The Airport Director Airport Road Eglinton. Co. Derry. BT47 3GY CoDA will consult with a wide range of agencies, organisations and community groups including:

- Airport Consultative Committee;
- Civil Aviation Authority (CAA);
- Derry City Council;
- Tourism Ireland;
- Northern Ireland Executive;
- NITB; and
- · Chamber of Commerce.



# **Chapter 13 References**

CAP 168: Licensing of Aerodromes (CAA, 2008).

City of Derry Airport Business Plan 2009-2019 (June 2009).

City of Derry Airport Catchment Analysis (RDC Aviation, 2009).

City of Derry Airport Economic Impact Study (York Aviation, 2009).

City of Derry Airport Environmental Baseline Report (Entec, 2010).

City of Derry Airport Local Plan Research: Final Report to the Department of the Environment Northern Ireland (Roger Tym & Partners, 2004).

Conservation (Natural Habitats) Regulations (Northern Ireland) 1995

Control of Development in Airport Public Safety Zones (Department of Environment, 2007).

Derry Area Plan 2011 (The Planning Service, adopted 2000).

Draft Northern Area Plan 2016 (The Planning Service, 2005).

Economic Development Strategy 2006-2009 (Derry City Council, 2006).

First Steps Towards Sustainability: A Sustainable Development Strategy for Northern Ireland (Office of the First Minister and Deputy First Minister, 2006).

Focus on the Future Tourism Development Strategy 2009-2012 (Derry City Council, 2008).

Guidance on Airport Transport Forums and Airport Surface Access Strategy (Department for Transport, 2005).

Guidance on the Preparation of Airport Master Plans (Department for Transport, 2004).

Northern Ireland Environment Agency (NIEA) Landscape Character Areas – www.ni-environment.gov.uk/land-home/ landscape\_home/country\_landscape.htm (accessed 2009). Planning (General Development) Order (Northern Ireland) 1993.

Planning Policy Statement 13: Transportation and Land Use (Regional Planning and Transportation Division, 2005).

Planning Policy Statement 21: Sustainable Development in the Countryside (Draft) (Department of Environment, 2008).

Planning Strategy for Rural Northern Ireland (Department of the Environment, 1993).

Regional Transport Strategy for Northern Ireland 2002-2012 (Department for Regional Development, 2002).

Safeguarding, Aerodromes, Technical Sites and Military Explosives Storage Areas Circular 1/2003 (Department for Transport, 2003).

Shaping Our Future: Regional Development Strategy for Northern Ireland 2025 (Department for Regional Development, 2001).

The Future of Air Transport Progress Report (Department for Transport, 2006).

The Future of Air Transport White Paper (Department for Transport, 2003).

The National Spatial Strategy for Ireland 2002-2020: People, Places and Potential (Department of the Environment and Local Government, 2002).

UK Air Passenger Demand and CO2 Forecasts (Department for Transport, 2009).

www.cityofderryairport.com (accessed 2009 and 2010).

www.detini.gov.uk (accessed 2009).

www.ni-environment.gov.uk/land-home/landscape\_home/country\_landscape.htm (accessed 2009).









Comments on the Master Plan can be made in writing to:

The Airport Director, City of Derry Airport, Airport Road, Eglinton, Co. Londonderry, Northern Ireland BT47 3GY

