Cornwall Airport Newquay
Masterplan 2015 - 2030

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Cornwall Airport
Newquay

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Cornwall Airport Newquay Artist's Impression - 2030

Site Address

Cornwall Airport Newquay
St. Mawgan
Cornwall
TR8 4RQ

Client

Aerohub at Cornwall Airport Newquay
Cornwall Development Company

Pydar House
Pydar Street
Truro
Cornwall
TR1 1EA

Masterplanners: HLM Architects

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Foreword

Cornwall Airport Newquay (NQY) is a vital part of Cornwall's transport infrastructure, providing connectivity to and from Cornwall and is as essential as road and rail. The Airport makes a significant economic contribution to the Cornish economy in terms of its Gross Value Added (GVA) output, but also as a key site of employment providing many skilled jobs and therefore Cornwall Council is committed to its sustainable development. In the wider context of the aviation sector, NQY supports one of the largest aerospace clusters in Europe with a number of global businesses operating from the Airport.

The Cornwall Airport Newquay Masterplan, which was approved and adopted by Cornwall Council in June 2009, has been reviewed to consider the changes in the aviation environment in recent years. The recent global economic recession, including the worst downturn in aviation in the last three decades, had a significant impact on the projections and plans contained within the 2009 Masterplan. The updated Masterplan reflects these changes and outlines how the Airport can develop and grow over the next 15 years, and how it can be more commercially and environmentally self-sustaining.

The Masterplan explores the options available for the Airport to provide high quality facilities, including the potential of a new passenger terminal site and a business environment to meet modern aviation needs.

The Masterplan also identifies how the Airport can continue to help Cornwall's economy grow, through the connectivity of existing air services and the growth of new services, whilst continuing the development of the site for aerospace businesses and other Airport related business activities. The Aerohub Enterprise Zone(EZ), established in 2012, is the only aerospace focused EZ and is a key consideration in the Masterplan.

Adam Paynter
Cabinet Member for Resources
Cornwall Council

Raglavar an Penntowl

Ayrborth Kernow Tewynblustri (NQY) yw rann vewek a isframweyth karyans Kernow, ow provia mellow dhe ha dhyworth an Vro, hag yw mar essensek avel fordhow ha hensyow horn. An ayrborth a wra kevro erbysek a vri dhe erbysiedh Kernow yn kever y eskorrans Talvosogeth keworrys kowal (TKK), mes ynwedh avel le arvethow a vri ow provia lies sodh sley aga gnas ha rag henna Konsel Kernow a omre dh'y dhisplegyans sostenadow. Yn kettesten ledanna an barth ayrennans, NQY a skoodh onan a'n brassa kuntellva ayr-efanvos yn Europa, gans niver a negysyow ollvysel a ober dhyworth an ayrborth.

Penntowl Ayrborth Kernow Tewynblustri, hag a veu komendys hag adoptys gans Konsel Kernow mis Metheven 2009, re beu daswelys rag prederi a-dro dhe'n chanjyow y'n kerghynnedh ayrennans yn bledhynnyow a-dhiwedhes. An kilans erbysiethek ollvysel a-lemmyn, synsys ynno an gwettha treyl war-nans yn ayrennans y'n diwettha teyr degvledhen, a'n jeva effeyth a vri war an darganow ha towlow synsys y'n Penntowl 2009. An Penntowl nowedhys a dhastewyn an chanjyow ma hag a dheskrif fatel yll an ayporth displegya ha tevi dres an nessa 10 bledhen, ha fatel yll omsostena moy, hag yn kenwerthel hag yn kerghynedhek.

An Penntowl a hwither an dewisyow kavadow may hallo an ayrborth provia komodytys a gwalita ughel, y'ga mysk an possybylta a dyller rag termynal trethysi nowydh ha kerghynnedh negys a gowlwul an edhommow a ayrennans arnowydh. An Penntowl a aswon ynwedh fatel yll an Ayrborth pesya gweres erbysiedh Kernow may teffo, dre junyans a wonisyow ayr a-lemmyn ha dre dhisplegyans a wonisyow nowydh, y'n kettermyn ha pesya displegya an tyller rag negysyow ayr- efander hag aktivitys negys kelmys dhe ayrborthow. An Barth Negysieth Ayrvoth, fondys yn 2012, yw an BN unnik hag yw fogellys war ayr-efander, ha prederyans a vri y'n Penntowl yw.

Adam Paynter
Esel an Kabinet rag Asnodhow
Konsel Kernow

Executive Summary

Cornwall Airport Newquay

Cornwall Airport Newquay is a vital part of Cornwall's transport and economic infrastructure, providing national and international connectivity to and from Cornwall. When combined with road and rail, the Airport supports a more resilient transport system for Cornwall, providing speed & choice for business, residents and visitors.

Cornwall Airport Ltd as operator and Cornwall Council as sole Shareholder of CAL and owner of the asset have responsibility for operating and developing the Airport under the framework provided by this Masterplan.

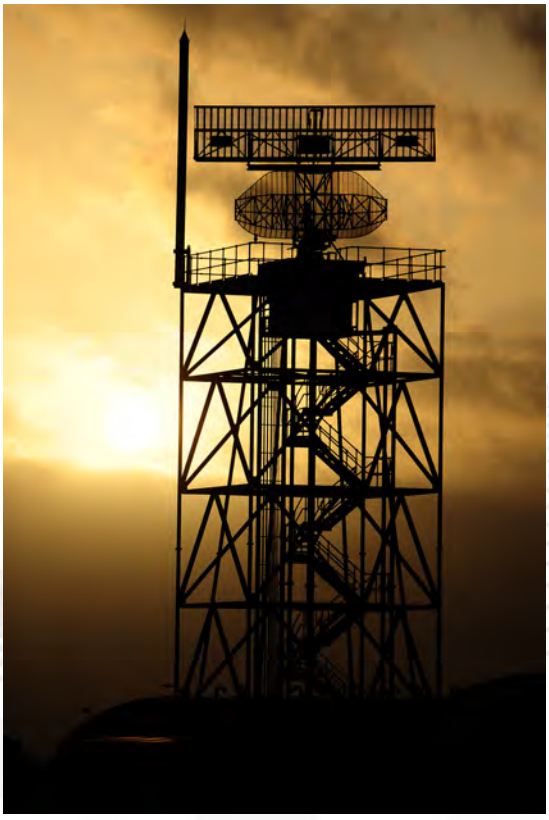
The Airport makes a substantial contribution of almost £50m to the Cornish economy in terms of its Gross Value Added (GVA) output. Over 700 skilled jobs are directly dependent on the operational Airport.

In the wider context of the aerospace sector, Cornwall Airport Newquay now supports one of the largest aerospace clusters (outside Bristol) in the West of England with a number of global businesses operating from the Airport. There are 14 companies employing 450 people on the Airport site.

The growth in jobs at Cornwall Airport Newquay is further supported through national economic policy. The Airport was awarded Enterprise Zone (EZ) status in 2011 and Aerohub EZ became operational in 2012. Since then, 8 new companies have created or safeguarded over 150 jobs. By 2030 over 2,200 jobs and £162m of GVA could be generated from the EZ including the developing Business Park.

The recent global economic recession had a significant impact on aviation which experienced its worst decline for over three decades impacting forecasted passenger growth and development plans. This Masterplan has been developed against the back drop of domestic and global economic recovery, and in particular an improving Aviation sector which will provide the opportunity for sustainable growth at the Airport.

The plan provides a clear strategy for Cornwall Airport Newquay's development over the next 15 years. The Development Frameworks within the plan provide a clear structure to support the growth in passenger numbers, accelerate delivery of infrastructure, create conditions that will enable the existing aerospace cluster to grow and attract new inward investment.



The Aviation Policy Framework (APF) sets out the Government's primary objective of achieving long-term economic growth. The aviation sector is recognised as a major contributor to the economy and Government policy supports growth in this sector within a framework which maintains a balance between the benefits of aviation and its costs, particularly its contribution to climate change and noise.

The Framework states that one of the Government's main objectives is to ensure that the UK's air links continue to make it one of the best connected countries in the world. This includes increasing links

to emerging markets so that the UK can compete successfully for economic growth opportunities. To achieve this objective, the framework states that it is essential to maintain the UK's aviation hub capability and develop links from airports which provide point-to-point services, in a balanced way.

A key priority of the APF is to work with the aviation industry and other stakeholders to make better use of existing runway capacity at all UK airports including:

- Encouraging new routes and services
- Supporting airports in Northern Ireland, Scotland, Wales and across England
- Ensuring airports are better integrated into the wider transport network

In line with the APF, the Masterplan provides evidence and guidance to the Airport and business to develop strategies to:

- Support growth and identify the benefits of aviation to the Airport
- Ensure climate change impacts are considered
- Ensure noise and other environmental impacts are considered
- Work together with Cornwall Council and the community
- Plan for future development

The Masterplan has explored the options available for the Airport to provide high quality facilities, including options for the development of the passenger terminal and creating a business environment to meet modern aviation needs.

It identifies how the Airport's current and future (growth) connectivity can continue to help Cornwall's economy grow. It also identifies options for continuing development of the site for aerospace businesses, achieved through the promotion of the Aerohub Enterprise Zone and other Airport related business activities, whilst acknowledging the environment and historic landscape in which it is situated.

The principles of the Masterplan can also be considered as part of any planning applications required to further development outside of the existing Local Development Orders and within the site boundary.

A full Economic Impact Assessment was undertaken to support the Masterplan. The following key points summarise the added value the Airport brings to Cornwall's economy:

Aerohub – Aerospace and Wider Economic Growth

The sector-specific focus of the Enterprise Zone could generate high-value employment in the economy, with more specific aviation profession salaries earned. According to data from the UK Aerospace Industry Survey, average aerospace salaries are 50% higher than the UK gross mean weekly salary.

Since 2012, Aerohub has attracted a range of companies to the site, in sectors mainly related to aviation and aerospace, but also in more diverse sectors such as renewable energy.

Companies such as Apple Aviation, AgustaWestland, Patriot Aerospace, Bristow Helicopters, Bloodhound, Ainscough Wind Energy Services and CIS are located at Cornwall Airport Newquay Enterprise Zone and they all depend on the Airport and the connectivity it provides.

The new EZ companies employ 161 FTEs (December 2014) at Aerohub and have a combined average salary of £33,408; this is considerably higher than the average salary in Cornwall (£17,344 ONS) and is representative of the salary levels for the types of employment created on site, which include engineers, semi-skilled labour, aircraft technicians, quality managers and management roles.

By 2030 it has been estimated that the EZ will grow as follows:

- Over a 1,000 jobs and £76m of GVA within the EZ Zones 1-3
- Over 1200 jobs and £86m of GVA in Phase 1 of the Business Park

Airport Development Strategy

As part of the Masterplan, mechanisms to improve standards and efficiencies have been considered along with the assessment of economic outcomes. The growth forecast analysis, terminal assessments and Development Zone frameworks within this plan have collectively provided evidence to determine the strategies to implement.

To assess the options for development the work undertaken has been considered within the following categories:

- Passenger Capacity
- Terminal Capacity
- Terminal Parking
- Airport Operational Equipment
- Transport–Surface Access Strategy (SAS)
- Property and Building's Condition
- Environmental and other development constraints
- Access and services
- Supply and demand
- Planning

Airport Development Strategy 0–5 Years

Within the next five years it may be necessary to address the following:

- Operational Airport
  - Undertake important operational regulatory requirements, and facility upgrades to safeguard current Airport terminal standards
  - Improve connections with business through promotion of facilities
  - Implement small-scale Travel Plan measures to improve awareness of and connectivity to the Airport
  - Designate and safeguard a potential southern terminal location for long-term planning
  - The management team to programme plans for growth
- Aerohub EZ
  - Continued promotion of the Airport and the EZ to support the diversification and growth of this nationally important asset as a place for aerospace inward investment and aerospace growth
  - Take Aerohub into next delivery phase – implementation and investment
  - Support the Airport to attract, grow and secure long term investment
  - Develop aerospace business space and wider economic activity thus reducing the operating subsidy to the operator, which the owner currently provides
  - Support the Airport operations to grow and promote business use of the Airport via improved connectivity, in particular SME access
  - Attract and grow important existing, emerging sectors and associated technologies such as space and the UAS sector
  - Accelerate programme of direct intervention to address skills gap
  - Keep planning and investment Frameworks current
  - Deliver infrastructure for growth

Airport Development Strategy 5–15 years

Within the next five to ten years it will be necessary to address the following:

- Undertake important operational regulatory repairs
- Carry out the remodelling of small areas of the existing terminal to accommodate passenger growth and to maintain a positive passenger experience
- Improve connections with business to aid commerce
- Implement wide-scale Travel Plan measures to accommodate assumed increased traffic resulting from improved passenger and commercial activity

- Further assess and plan a potential southern terminal for future delivery
- Continue management programme of planned growth
- Continue to promote the benefits associated with the Airport as an aviation hub

Costs and Revenues

Cost analysis and a market evaluation has been undertaken for each of the Masterplan Development Zones as an aid to focus potential revenue generation and delivery of economic outcomes.

By using income forecasts and by identifying potential funding opportunities from European, central Government and local council resources, specific business opportunities can be progressed to support the aspirations of this Masterplan.

The more certain the Masterplan development strategy can be, the more investment opportunities can be sought. The development zone strategies, Aerohub EZ and the LDOs offer a framework for growth and investment and collectively these provide financial incentive tools to facilitate the growth of the Airport.

New Terminal Strategy

An appraisal of the future location of the terminal captures the key trigger points associated with the development options available. These are tabulated in the main Report and can be summarised as:

- Option 1a - Do nothing, minor repairs to terminal, retain in its current location
- Option 1b - Minor refurbishment and expansion of terminal to meet needs of capacity forecast
- Option 1c - Expansion of existing terminal location to improve space standards
- Option 2 - New southern terminal to future-proof terminal standards at a regional level, to help facilitate a business environment and to present the Airport as an aviation and aerospace hub

In order to process the decisions required to maintain and future proof the Airport, the option assessment has been categorised into the following actions:

- NO CHANGE - Operation and function of Terminal building and equipment meets current passenger numbers
- ASSESSMENT STUDY - Commissioning of work to assess, design and cost the changes required to meet increased passenger numbers
- IMPLEMENT - Assessment study projects to be planned, undertaken and phased, to meet increased passenger numbers and promote further growth

Based upon the analysis undertaken in preparing the Masterplan, over the remaining period to 2030 the terminal will remain in its current location. Passenger numbers are forecast to increase, which is likely to place further pressure on the existing terminal building in its current form. However, through careful management and the implementation of measures to improve the existing facilities, passenger numbers at the existing terminal are able to double from their current level before reaching a critical capacity point.

Community Engagement Summary

Cornwall Council (CC) supports a proactive approach to public consultation and the Council's policies and commitments to consultation are set out in their own Statement of Community Engagement.

As part of the overall development of this Masterplan a consultation strategy was developed to set out how and when the Airport's stakeholders and wider community could become involved. Embodied within the commitment by CC to seek the views of both stakeholders and the wider community on major projects such as the Airport's development, is the desire to work with those directly affected by the proposed development.

The process has followed the fundamental principle that the Masterplan represents a partnership approach to development management. This requires an approach to consultation which seeks support and ownership for the concept of the Masterplan and its objectives, both among the participants and the community's wider stakeholders.

The Masterplan was presented for public consultation over a 7.5 week period commencing on 30th November 2014 and ending on 23rd January 2015.

The majority of respondents (56%) were positive about the Airport Masterplan and were supportive of its proposals, 28% were neutral in opinion and 16% raised objections/concerns. All of the comments received have been considered as part of this Masterplan.

This Masterplan outlines the options for the development of Cornwall Airport Newquay supporting passenger growth and the development of aerospace activity.

1.0
Introduction

1.1 Airport Ownership and Operator

1.1.1 The freehold of Cornwall Airport Newquay (NQY) is owned by Cornwall Council (CC); the Airport is operated under a long lease by Cornwall Airport Limited (CAL), a company in which CC has a 100% shareholding.

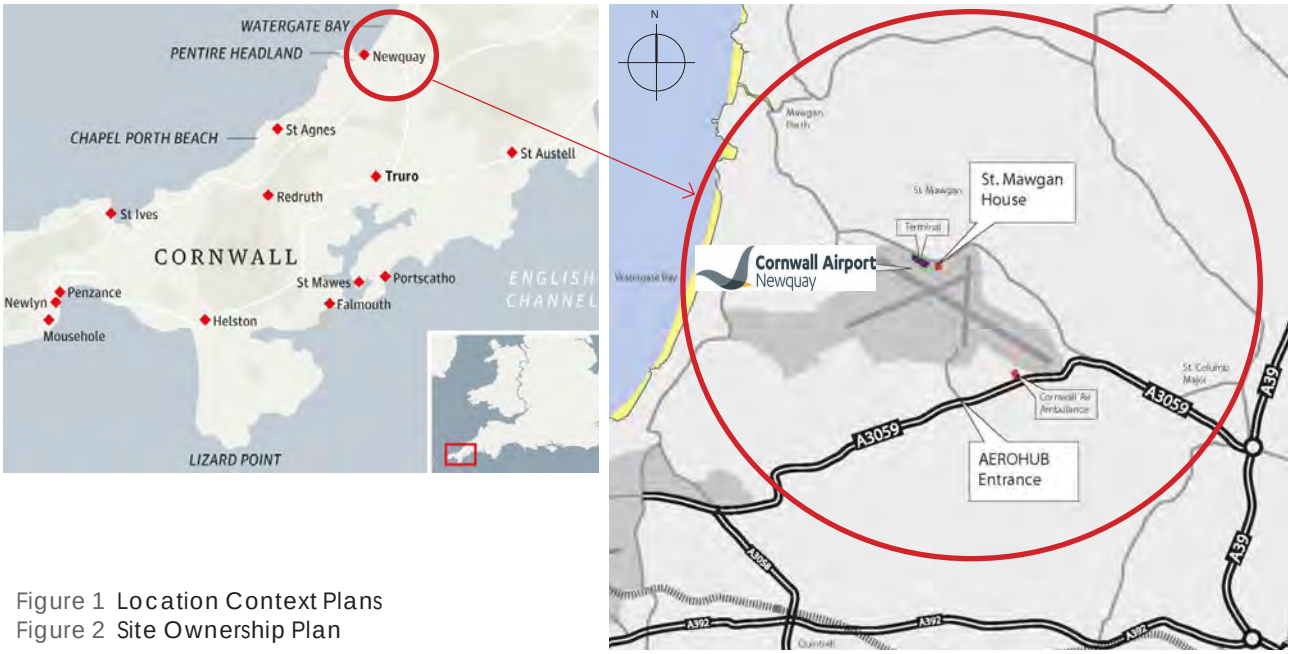
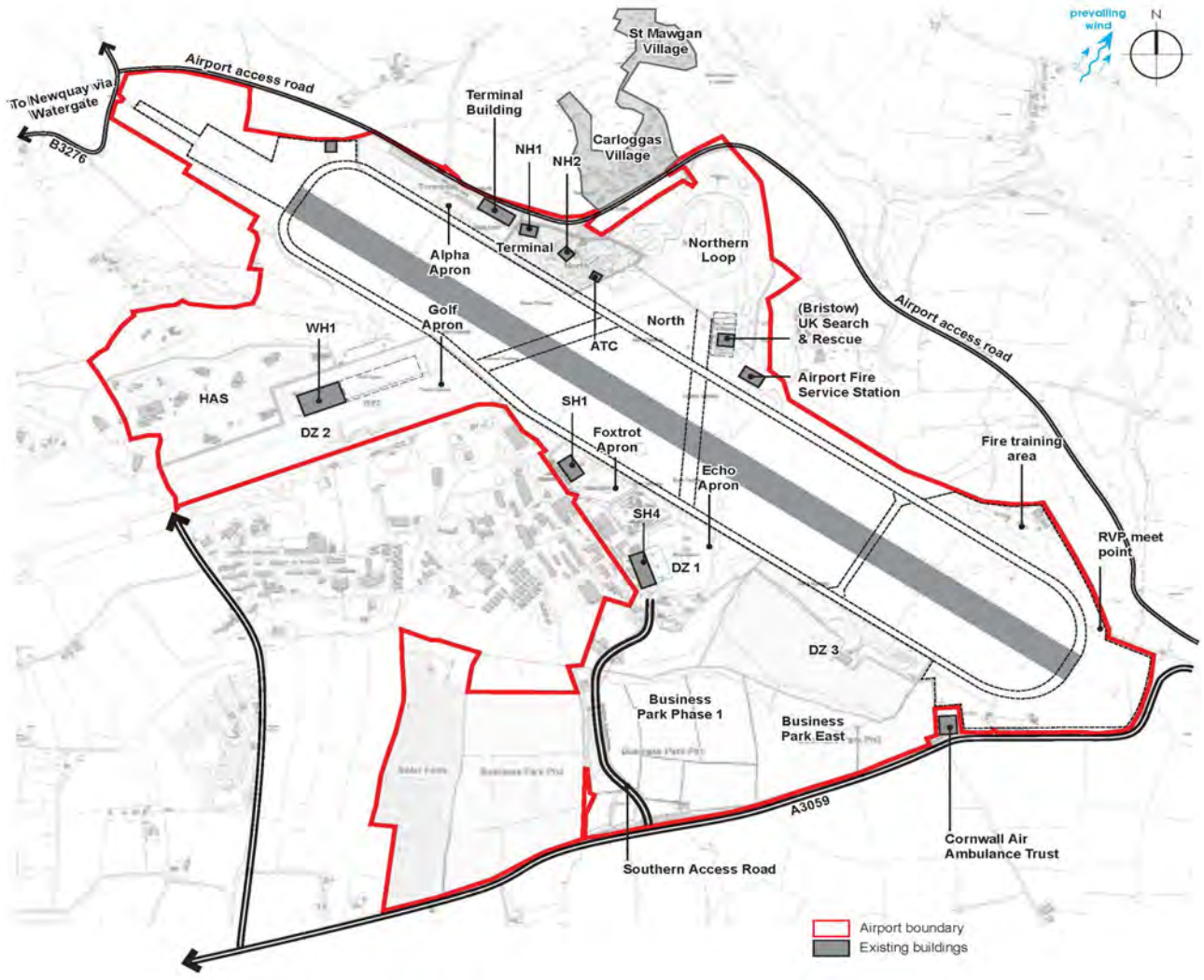


Figure 1 Location Context Plans
Figure 2 Site Ownership Plan



1.2 Purpose of the Masterplan

1.2.1 The revised Masterplan examines the future infrastructure and terminal capacity requirements and land use and development opportunities at NQY covers the period 2015–2030.

1.2.2 The aims and aspirations of the Airport Masterplan, approved by CC in June 2009, were significantly affected by the global economic downturn which occurred soon after its adoption and by the consolidation and regulatory changes in the industry which accompanied it. The overall effect was material, largely negative changes to the sector in the UK and internationally that fundamentally changed the environment in which the Airport operates.

1.2.3 The conditions and assumptions which underpinned the 2009 Masterplan have therefore had to be up-dated to reflect the new economic, regulatory and fiscal realities. Key areas of the Masterplan which have been updated as a result of this review include:

Passenger Growth and Future Development

1.2.4 The quantum and trajectory of passenger growth envisaged has been materially down-graded with the result that any short term requirement for a new terminal can be deferred.

1.2.5 Looking forward, the rate of development provided for in the Masterplan needs to reflect lower passenger growth rates and more modest development expectations.

Economy

1.2.6 A number of documents have been reviewed during the development of the Masterplan and the major changes to the wider economy since 2009 have been taken into account. These include:

- DfT Aviation Policy Framework (March 2013)
- National Planning Policy Framework (2012)
- Cornwall Council Core Strategy/Local Plan (November, 2012)
- Cornwall Council Economic White Paper Review (October, 2012)
- Passengers Carried and Forecast (Newquay Cornwall Masterplan, 2008)
- Cornwall & Isles of Scilly Local Enterprise Partnership (LEP) Strategy (2015-2030)
- Cornwall Airport Limited Business Plan (2012-2015)
- Market Assessment and Traffic Forecast (RDC Aviation, May 2013)
- Aerohub Enterprise Zone Implementation Plan (January 2012)
- Market Assessments for the Aerohub Business Park (Roger Tym & Partners 2012)

Aviation Policy Framework

1.2.7 The Aviation Policy Framework (APF)[1] sets out the Government's aviation policy - in the context of the contribution the industry can make to achieving long- term economic growth. The aviation sector is recognised as a major contributor to local regional and national economies and the Government states that it would support its continued growth within a framework that maintains a balance between the benefits of aviation and its costs, particularly its contribution to climate change and noise.

1.2.8 The APF is clear that one of the Government's strategic aviation objectives is to ensure that the UK's air links continue to make it one of the best-connected countries in the world. This includes not

just domestic and short haul links, but also enhancing the network and frequency of services to emerging markets so that the UK can compete successfully for economic growth opportunities. To achieve this objective, the APF states that it is essential both to maintain the UK's aviation hub capability and develop links from airports which provide point-to-point services and that this should be done in a balanced way.

1.2.9 An important priority of the APF considers that industry and other stakeholders should work together to make better use of existing runway capacity at all UK airports including:

- Encouraging new routes and services
- Supporting airports in Northern Ireland, Scotland, Wales and across England
- Ensuring that airports are better integrated into the wider transport network

1.2.10 The APF offers policy guidance on the issues that should be addressed by airports in their future masterplanning, encompassing:

- Forecasts
- Infrastructure proposals
- Safeguarding and land property requirements
- Surface access initiatives
- Impact on people and the natural environment
- Proposals to minimise and mitigate impacts

These impacts are considered in Sections 4-9 of this document.

1.2.11 In line with APF[1] requirements, this report will be used to provide evidence and guidance to the Airport and prospective businesses to develop strategies to:

- Support growth and identify the benefits of aviation to the Airport
- Ensure climate-change impacts are considered
- Ensure noise and other environmental impacts are considered
- Work together with Cornwall Council and the community
- Plan for future development

1 Aviation Policy Framework, Department for Transport (DfT), March 2013

Airport Masterplans

1.2.12 The Government believes that the preparation of Airport Masterplans will offer a range of wider benefits in addition to their value in informing the planning process. The benefits, articulated by the APF2[2] include:

- Providing an indication of an airport operator's plans for infrastructure development in light of the high-level strategic policy framework, and therefore bringing greater clarity and certainty for all those affected or with an interest in the development
- Informing long-term resource planning for local and regional players, particularly in the preparation of strategies and local plans
- Providing a useful tool for communicating the potential of the Airport to a range of stakeholders, including airlines, funding institutions, the local authority and other local parties, which allows them to make well-informed investment decisions
- Helping airport operators to make clear at an early stage the key milestones of their development projects that align to their growth strategy
- Providing a consistent and publicly recognised vehicle for the Government, devolved administrations and their agencies to assess progress being made in delivering the Government's APF at each airport
- Demonstrating the range of costs and benefits of Airport growth
- Enabling airport operators and others to assess local social and environmental impacts (including those arising from land take and habitat loss) and providing an opportunity to develop preliminary proposals on how those impacts could be mitigated

The Masterplan Response for Cornwall Airport Newquay

1.2.13 The Cornwall Airport Newquay Masterplan has been developed over a period of time. A high-level assessment of all baseline material relevant to the physical conditions of the Airport has been undertaken. These include studies of the current context, survey data, land ownerships, local economic and social factors, aviation forecasts, local impact and mitigation, viability of moving the terminal building, a risk assessment and costing. In addition, stakeholder engagement has been undertaken, as recorded and summarised in appendix 14.28.

1.2.14 Using these studies and consultations as a foundation, this Masterplan has been produced. Potential low, medium and high passenger growth scenarios have been considered for the terminal and a series of Masterplan frameworks have been generated. These provide information to support the Airport Owner (CC) and the Airport Operator (CAL) to structure future investment. The intention is to maintain the Airport standards despite changing demands, and to meet future development needs within the site.

1.2.15 This Masterplan provides a new strategy that will assist the Airport through its next phase of development and growth.

1.2.16 This Masterplan is flexible and relevant to the Airport's life through 2015–2030, considering a number of economic scenarios that may affect the development of the Airport. Any actions required to maintain its relevance have been identified and should be undertaken as part of the Airport's long-term development.

2 'Aviation Policy Framework', Department for Transport (DfT), March 2013, pg69, para4.11

2.0
General Background

2.1 History of Cornwall Airport Newquay

2.1.1 The former Cornwall County Council took over responsibility for the civil passenger terminal (enclave) operation at the Airport in April 2004 from Restormel Borough Council. Until the end of 2008, the Airport at Newquay operated as RAF St Mawgan, which included a small civilian airport enclave that offered commercial air services for more than forty years.

2.1.2 Cornwall County Council (now CC) together with other partners took the bold and far-sighted strategic step to acquire the airfield from the MoD, (following the MOD's decision to close the RAF station in 2006) and invest in the site to maintain commercial flying at what amounted in licensing terms to a new civilian airport.

2.1.3 A transition project to upgrade the infrastructure to comply with regulations required for a licensed civilian Airport from the Civil Aviation Authority (CAA) was undertaken. This included a new air traffic control landing system and tower, new aerodrome lighting a new runway surface, improvements to the terminal building and a new Fire and Rescue station.

2.1.4 The key milestones were as follows:

2006	MoD confirms intention to cease military flying
	Airport defined as not fit for civilian purposes
2006–11	Cornwall (County) Council five-year development plan established
	CAP 168 transition works Identified 2006
	Interim Development Strategy 1 (IDS) instructed and completed 2008
2007	IDS 2 instructed and completed 2009
2008	IDS Plus instructed
	Transition works completed and CAA licence granted
	Masterplan 2008–2030 completed

2.1.5 The principal funding partners (Cornwall Council, South West Regional Development Agency (SWRDA) and European Regional Development Fund (ERDF) (Objective 1 and Convergence) invested over £60m in the Airport to deliver this programme.


Newquay Airport - 2001

2.2 Airport Masterplan Update and Vision

2.2.1 The vision for the Airport as articulated in the 2009 Masterplan document was for:

> *'The creation of a safe, secure, efficient and commercially successful regional Airport at the centre of an aerospace cluster of aviation related and associated activities, which acts as a key driver of the whole Cornish economy and a strategic employment area designed the best sustainable development principles, offering a model for other regional airports to aspire to'.*[3]

2.2.2 This remains a succinct statement of the Council's aspirations for the Airport and those of its key stakeholders. With this in mind, the Airport already offers or benefits from a number of unique or beneficial features, including:

- One of the longest runways in the UK at 2,744m
- A State-of-the-art operational civilian Airport with Cat III ILS, modern radar and air traffic control and model fire and rescue and training ground assets
- An unparalleled aviation environment providing uncongested and unrestricted airspace with direct access to North Atlantic
- Ready access to both maritime and land-based environments
- A UK Government EZ, with European and other financial support and incentives available
- A growing aerospace cluster, dovetailed within a globally significant network of such companies based in the South West of England and Wales.
- Good surface transport access
- A committed airport owner and strategic stakeholder group

2.2.3 Since 2009, a number of further initiatives have been completed successfully:

2009	North Hangar 2 completed
2011	Southern Access Road (SAR) completed
2012	Local Development Order 1 granted
2013	Local Development Order 2 granted
2014	Business Park phase 1 access and services commenced
2015	Masterplan 2015 –2030 approved

3 'Newquay Cornwall Airport Masterplan 2008 - 2030', Cornwall Council, 2008, para2.2

2.3 The Airport Today

Passenger services

2.3.1 In the calendar year 2013, the Airport was used by around 185,000 passengers (significantly down on its summer 2008-09 peak). The downward trend was finally reversed in 2014 (after a great deal of hard work by the Airport's management and Board and unwavering support from its owner and supporters,) when passenger numbers increased by 20% to over 220,000. The forecast for 2015 is circa 250,000.

2.3.2 The stronger performance in 2014 was mainly due to increased demand on the daily services to and from London Gatwick and Manchester. Over 100,000 of the total passenger throughput in 2014 flew between NQY and London Gatwick on the regular scheduled service operated by Flybe. But NQY-Manchester and summer services between NQY and Birmingham and Liverpool were also extremely popular.

2.3.3 The Gatwick service is operated under a public service obligation (PSO) with 3 daily departures to and from NQY year round. The service allows travellers the convenience of being able to get to and from London within the same day.

2.3.4 In 2015 Flybe commenced, as part of its summer schedule, a daily service between NQY and London Stansted and a new airline to the Airport (Aer Lingus) introduces a direct service to and from Dublin, with flights up to 5 times weekly (in the peak summer months). The additional route/ destinations to NQY mean regional connectivity is bolstered the onward connectivity offered by hubs and their airline partners.

2.3.5 NQY currently offers scheduled flights to:

- Belfast City
- Birmingham International
- Dublin
- Dusseldorf
- Edinburgh
- Isles of Scilly
- Liverpool
- London Gatwick
  (Public Service Obligation secured)
- London Stansted
- Manchester
- Newcastle

Other Aviation Activities

2.3.6 There are a number of other aviation activities which operate alongside the passenger operation – these include rotary training, executive/general aviation, commercial airline training, military training as well as humanitarian flying operations (e.g. aid flights and the Cornwall Air Ambulance).

2.4 Benefits of Aviation

2.4.1 A recent report[4] that sought to quantify the economic value of the UK's aviation 'sector', taken here to encompass UK airlines, airports, other related ground-based and air traffic management infrastructure and aerospace manufacturing, confirmed again previous analysis that as an industry aviation generates substantial benefits to the UK's economy. The report highlights that in 2012 the aviation sectors contribution to:

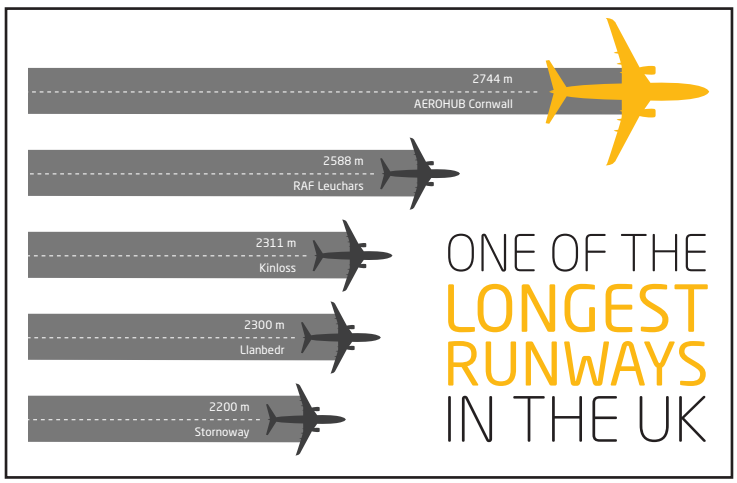
- UK GDP of £51.966 billion, which equates to 3.4% of the total UK economy, with the largest single contribution coming from Airports and ground services, closely followed by aerospace and then airlines
- UK employment is 961,000 jobs (3.3% of the UK total), with Airports and ground services contributing 433,000 jobs, aerospace 327,000 jobs and airlines 200,000 jobs
- Direct tax contribution (i.e. excluding corporation tax) is £8.683 billion

2.4.2 Comparable data for 2009 showed a contribution to GDP of £49.6 billion, jobs at 921,000 and direct taxation of £7.9 billion; in other words an increase across all three main measures.

2.4.3 Connections to other airports, in the form of new routes and services, broaden a region's transport network providing catalytic as well as direct, in-direct and induced economic and social benefits. In the case of Cornwall these arise as a result of Aviation facilities encouraging economic growth, which impacts positively on Cornwall through;

- the increased productivity of local businesses and GVA
- improving access to import/export opportunities for both new and existing businesses
- creating opportunity for partnering and wider networking to maximise R&D and investment in new markets, that might otherwise have not been possible
- the encouragement of more skilled professionals into the area and making the training of new/existing employees in manufacturing skills and technology businesses possible
- enabling access from tourism markets that might otherwise have been out of reach
- stimulating a buoyant travel culture for family and friends in the area

2.4.4 The Airport owner and operator are aligned to deliver economic and connectivity growth and this Masterplan defines the framework to support this strategy.



4 'Economic Benefits Contribution from Air Transport in the UK', Oxford Economics, November 2014

Local Economic Impact

2.4.5 In the case of Cornwall Airport Newquay, the Airport's economic impact is summarised in the following headlines from a recent study:

- There are 14 companies employing 448 people based at NQY
- Since its creation in 2012, the EZ has attracted 8 new companies creating or safeguarding over 214 jobs
- 720 jobs including 136 Full-Time Equivalent (FTEs) employed by CAL are directly dependent upon the Airport
- When indirect and induced jobs are included, 988 FTEs are dependent upon the Airport
- Overall economic impact of the Airport is currently around £48m net (£62m gross) a year
- £22.3m of GVA resulting from the tourist trips made through the Airport
- £22.2m of GVA resulting from the full time jobs supported by the Airport

Aerohub Enterprise Zone

2.4.6 Aerohub at Cornwall Airport Newquay is led by the Cornwall and Isles of Scilly Local Enterprise Partnership and CC, as the owners of the Airport and surrounding land. The EZ designation is essentially about supporting the Airport to attract 'on site' aerospace and related business that will grow and secure long term investment and jobs. This will hopefully over time help to reduce the operating cost support that Cornwall Council continues to provide to the Airport.

2.4.7 Expressed more formally, the principle objectives of the EZ are to:

- Enable Cornwall Airport Newquay and the EZ to support the diversification and growth of this nationally important asset as a place for aerospace inward investment and aerospace growth
- Support the Airport to attract, grow and secure long term investment
- Develop aerospace business space and wider economic activity thus reducing the operating subsidy to CAL, which CC currently provides
- Attract and grow important existing, emerging sectors and associated technologies such as space and the UAS sector

Good progress is being made and the high risk, but essential investment made by CC and other partners is beginning to deliver material economic benefits that were always anticipated. Companies like Apple Aviation, AgustaWestland, Patriot Aerospace, Bristow Helicopters Ltd , Bloodhound and CIS now call the EZ home and they all depend on the Airport and the connectivity it provides. The average wage within these companies is almost double that of the Cornwall average.

2.4.8 Aerohub is the only aerospace focused EZ on an operational Airport in the UK and so has a unique offer to the aerospace industry and aviation related companies looking for a well-connected site with land for development. The EZ incorporates an area of 263Ha (650 acres) in 3 airside Development Zones and a major Business Park site. Local Development Orders (LDO) also cover the EZ. NQY was the first in the UK to secure an LDO and consequently is one of the largest planning-free development sites in the UK. Ultimately, it could accommodate over 186,000 m^2 (2,000,000 ft2) of hangar space, offices and manufacturing and support 5,000 jobs.

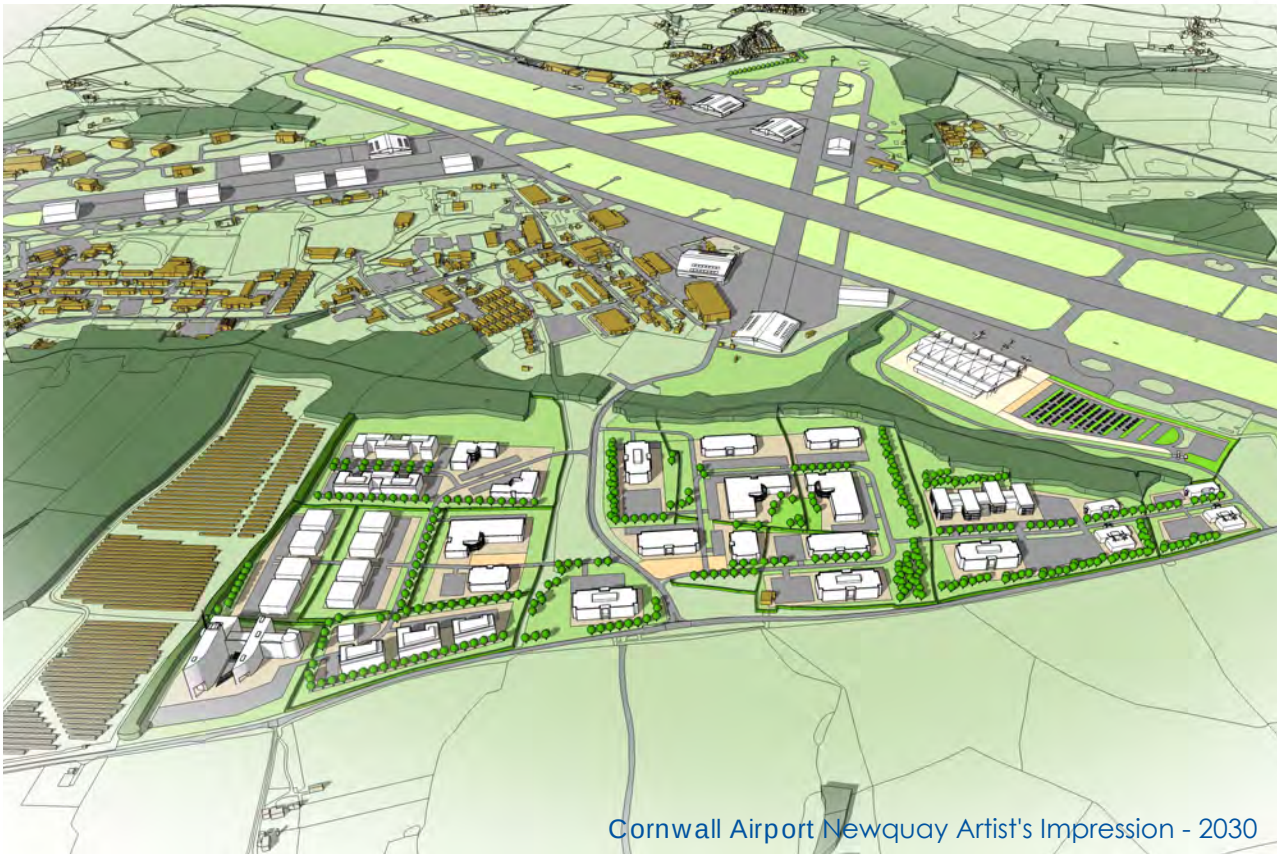
2.4.9 By 2030 it has been estimated that the EZ will have generated:

- Over a 1,000 jobs and £76m of GVA within EZ Zones 1-3, and
- Over 1200 jobs and £86m of GVA in Phase 1 of the Business Park

An Exciting Future

2.4.10 There is clear evidence that having survived the economic downturn intact, there is increasing evidence that Cornwall Airport Newquay has the potential to develop into a growing cluster of high value economic activity, delivering real change to Cornwall's economy and providing well paid highly skilled work for the local community.

2.4.11 This Masterplan refreshes its predecessor. It provides an exciting, but realistic, strategy for the Airport's future development and a clear framework within which to continue recent successes by attracting inward investment and accelerating infrastructure investment to underpin further growth.



Cornwall Airport Newquay Artist's Impression - 2030

2.5 Strategy Policy and Planning

There are a number of areas of national policy that are relevant to the Airport's future development. This section of the document reviews these and indicates how the Masterplan will help to ensure the Airport responds to them effectively.

Aviation Policy

2.5.1 The Department for Transport's (DfT) Aviation Policy Framework[5] provides a sustainable framework for UK aviation and focuses on the benefits of aviation as well as its environmental impacts. A key priority in the short term (2020), is for the aviation industry and other stakeholders to work together to ensure better use is made of existing runways at all UK airports. (See section 1.2.7).

2.5.2 The APF, recognises the very important role airports across the UK play in providing domestic and international connections and the substantive contribution they can make to the growth of regional economies. For more remote parts of the UK, such as Cornwall, aviation is not a luxury - it provides essential connectivity.

2.5.3 Within its overriding philosophy of wanting to see the best use of existing Airport capacity, the Government supports the growth of airports in Northern Ireland, Scotland, Wales and airports outside the south-east of England, including Cornwall Airport Newquay. It emphasises that proposals for expansion at regional airports should be judged on their individual merits, taking careful account of all relevant considerations, particularly economic and environmental impacts.

2.5.4 The Department for Transport's (DfT) 'UK Aviation Forecasts'[6] report, which accompanies the APF, sets out projections for passenger numbers, air transport movements and aviation carbon emissions at UK airports at different future time horizons. In summary it states:

- Demand for air travel is forecast to increase within the range of 1–3% a year up to 2050, compared to historical growth rates of 5% a year over the last forty years
- Taking into account the impact of capacity constraints, passenger numbers at UK Airports are forecasted to increase from 219 million in 2011 to 315 million in 2030
- The central forecasts of passenger numbers in 2030 represent a reduction of around 7% from levels previously forecast by the DfT in August 2011 – this reflects revisions to the Office of Budget Responsibility's (OBR) forecasts for the UK economy and the Department of Energy and Climate Change's (DECC) projections of oil prices
- The major south-east airports are forecasted to be running at full capacity by 2030, but this projection is by no means definitive, they could actually be at full capacity as soon as 2025 or as late as 2040 – Heathrow remains, as now, full across all the demand cases considered
- CO^2 emissions from flights departing the UK are forecasted to increase from 33.3 Million Tons of CO^2 ($MtCO^2$) in 2011 to 47Mt CO^2 within the range 35–52Mt CO^2 by 2050

2.5.5 The National Connectivity Task Force was established to develop proposals for how air links from the UK's nations, regions and Crown Dependencies to London and the major airports serving London and the South East Region could be improved. Their report[7] 'Air Connectivity Matters – Linking the Nations and Regions of Britain to London and the Wider Global Economy' provide a recommendation on how regional airports can improve connectivity. One of the concluding statements in the report[7] (section 12.1,viii) states: 'Encouraging additional regional connections from smaller UK regional airports to alternative international hubs (such as Amsterdam, Paris, Frankfurt and Dublin) at viable business frequencies to take advantage of the capacity and connecting opportunities for the short period while slots are available there'.

5 Aviation Policy Framework, The Department for Transport (DfT), March 2013
6 'UK Aviation Forecasts', Department for Transport (DfT), January 2013
7 'Air Connectivity Matters - Linking the Nations and Regions of Britain to London and the Wider Global Economy', The Report of the National Connectivity Task Force, March 2015

Aerospace Policy

2.5.6 'Lifting Off - Implementing the Strategic Vision for UK Aerospace'[8] was developed jointly between industry and Government in the Aerospace Growth Partnership (AGP). The strategy sets out a programme that is intended to secure the future of the UK's aerospace industry over the next decade; it is hoped that the strategy will capture the market opportunities from global growth in air travel.

2.5.7 Amongst the stated objectives set out in the above documents, are:

- Ensure the UK remains Europe's number one aerospace manufacturer and that it remains second only to the United States globally
- Support UK companies at all levels to broaden and diversify their global customer base
- Provide long-term certainty and stability to encourage industry to develop the technologies for the next generation of aircraft in the UK

2.5.8 The strategic priorities to support and develop the aerospace industry are:

- Technology – focusing on being quieter, greener, lighter and cheaper
- Supply chain competitiveness and manufacturing capability – focusing on being leaner, cheaper, faster and better
- Skills – securing the knowhow of the future

2.5.9 Aerohub at NQY is the local delivery project for this national strategy, which aims to maximise the use of nationally important asset by the aerospace sector. To achieve this, the continued promotion of the Airport and the EZ is required to support the diversification and growth of the Airport as a place for aerospace inward investment and growth.

2.5.10 The creation of Aerohub and this Masterplan contribute to the delivery of this policy objective by the Owner and Operator facilitating growth of the Airport. Through implementation and investment the following could be achieved:

- Support the Airport to attract, grow and secure long term investment
- Develop aerospace business space and wider economic activity thus reducing the operating subsidy to the Operator which the Owner currently provides
- Attract and grow important existing and emerging sectors as well as associated technologies such as space and the Unmanned Aerial Systems (UAS) sector

Economic Policy Support for Business Park

2.5.11 The Aerohub EZ is identified as a priority investment in the Cornwall and Isles of Scilly (C&IoS) Strategic Economic Plan (May 2014) produced by the C&IoS LEP. The Plan covers the period 2014–2020 and states that:

> *'it expects that investment in Aerohub would unlock further growth of both the aerospace and space sectors, including the Cornwall Institute for Advanced Technology. An industry led training establishment'*
>
> *It also states 'we will support the progress of Cornwall Airport Limited and increase aviation related usage on the Aerohub site'*[9]

8 Lifting Off - Implementing the Strategic Vision for UK Aerospace', Department for Transport (DfT), March 2013

9 'Economic and Culture Strategy 2013-2030', Cornwall Council Strategic Issue 2, Cornwall Connectivity, September 2013

Enterprise Zone Policy

2.5.12 The Airport is identified as one of twenty-six Government-backed sites in England that are helping growth by offering high quality business incentives and world-class infrastructure.

2.5.13 Enterprise Zones (EZ) allow areas with real economic potential to create the new business growth and jobs that they need, with positive benefits across the wider economic area. The core EZ offer is around simplified planning and business rate reliefs in EZ areas, with the capability to develop roles to address local economic challenges focused around:

- Maximising opportunity
- Minimising displacement
- Ensuring long-term viability and strategic fit

2.5.14 The new generation EZs reflect the Government's core belief that economic growth and job creation should be led by the private sector. Competition to attract foreign inward investment will be highly valued, with the fundamental aim of creating new businesses and new jobs. To achieve this Aerohub EZ will:

- Focus on investor engagement, business development and growth
- Work with industry in partnership to deliver investment
- Keep a competitive advantage
- Accelerate a programme of direct intervention to address the skills gap
- Keep planning and investment frameworks current
- Deliver infrastructure for growth: innovation/incubator provision, airspace, taxiways, buildings, Airport/spaceport infrastructure, Business Park infrastructure and remove any growth or development constraints

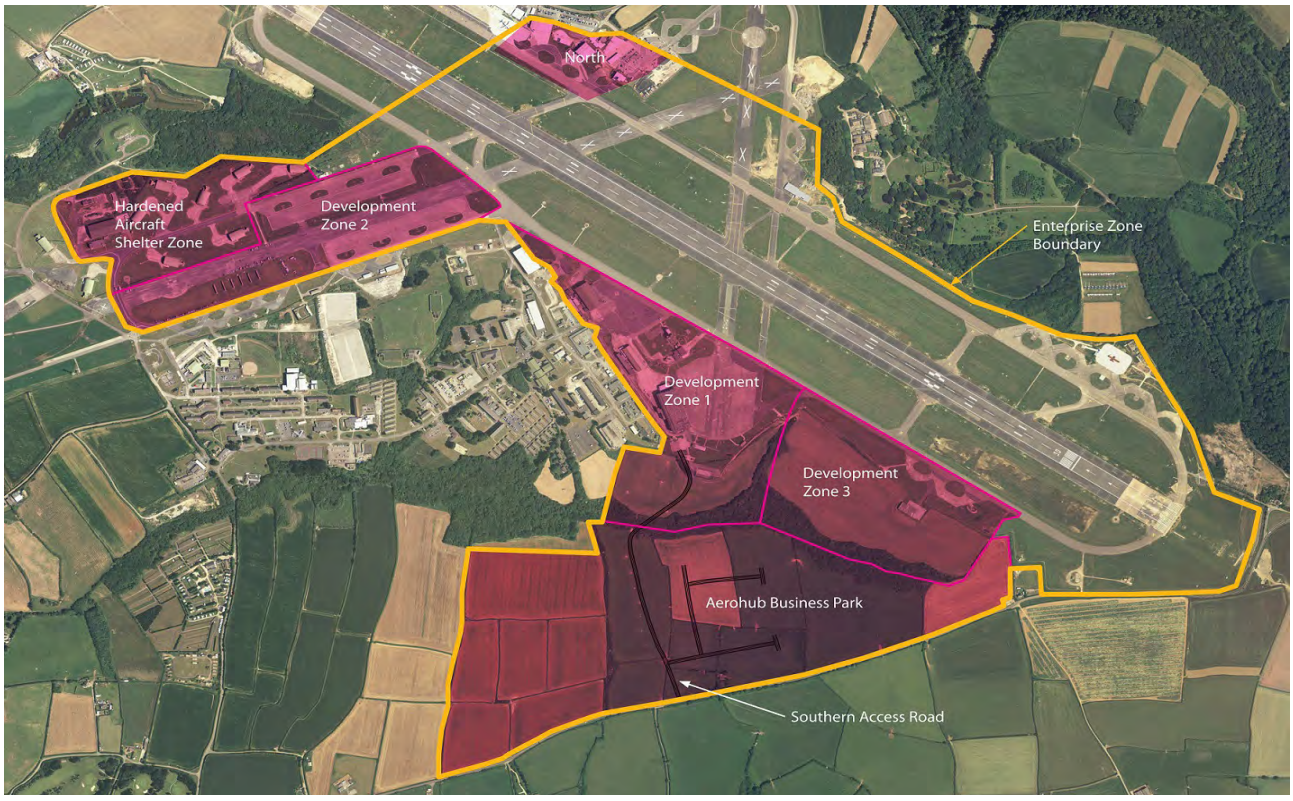


Figure 3 Enterprise Zone Boundary

2.5.15 'Aerohub at Cornwall Airport Newquay' was awarded EZ status in August 2011 (through a competitive bid process) and went live in April 2012.

2.5.16 In addition, section 5.17 of the APF[10] provides support to deliver the aims of Aerohub, which in turn will facilitate aerospace growth by attracting inward investment and other complementary development at Airports.

UK Spaceport

2.5.17

> 'Our plan is for Britain to have a fully functional, operating spaceport by 2018. This would serve as a European focal point for the pioneers of commercial spaceflight using the potential of spaceflight experience companies like Virgin Galactic, XCOR and Swiss S3 to pave the way for satellite launch services to follow. It would also create a centre of gravity for related technology and service businesses'[11]
>
> – Robert Goodwill MP, Parliamentary Under Secretary, Department for Transport

2.5.18 NQY has been shortlisted by the UK Government as a possible location for a UK Spaceport, which will make Cornwall a magnet for space and aerospace investment. The UK has an ambition to capture 10% of a global space market, expected to be worth £400 billion by 2030. A key project to realise this ambition is delivering a Spaceport in the UK by 2018.

National Planning Policy

2.5.19 The National Planning Policy Framework (March 2012) (NPPF)[12] sets out the Government's principles for economic, environmental and social planning policy for England. The Framework articulates the national strategy for sustainable development. The Government intends that this vision should be interpreted and applied to meet local aspirations.

2.5.20 The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development (paragraph 6)[12] and it is underpinned by a presumption in favour of sustainable development (paragraph 14)[12]. The Government is committed to securing economic growth in order to create jobs and prosperity, building on the country's inherent strengths, and to meet the twin challenges of global competition and of a low carbon future. The Masterplan will enable the development of NQY, and support its sustainable growth.

2.5.21 This is supported on a national level, identified in section 4 of NPPF 'Supporting sustainable transport'(paragraph 31), which states 'Local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development, including large scale facilities such as rail freight interchanges, roadside facilities for motorists or transport investment necessary to support strategies for the growth of ports, airports or other major generators of travel demand in their areas.'[12]

10 Aviation Policy Framework, Department for Transport (DfT), March 2013
11 www.robertgoodwill.co.uk/
12 The National Planning Policy Framework, Department for Communities and Local Government, March 2012

2.5.22 Paragraph 33 goes on to state 'When planning for ports, airports and airfields that are not subject to a separate national policy statement, plans should take account of their growth and role in serving business, leisure, training and emergency service needs. Plans should take account of this Framework as well as the principles set out in the relevant national policy statements and the Government Framework for UK Aviation.'[12]

2.5.23 As part of a prosperous rural economy the NPPF states that planning policies should (paragraph 28)[12] support sustainable rural tourism and leisure developments that benefit businesses in rural areas, communities and visitors, and which respect the character of the countryside. This should include supporting the provision and expansion of tourist and visitor facilities in appropriate locations where identified needs are not met by existing facilities in rural service centres.

2.5.24 The Masterplan responds to the NPPF by addressing the need to protect the countryside by addressing effects of development on biodiversity, and pollution to water and air. This Masterplan also addresses how development at the Airport will contribute to the Government's objectives for rural areas, by increasing the accessibility to rural areas and improving access to employment areas.

2.5.25 Paragraph 56 emphasises the importance of design to the built environment, and that good design is a key aspect of sustainable development and good planning. The NPPF also states a requirement for high quality and visually attractive development, as stated in paragraphs 58 and 59. The proposed development seeks to ensure that good quality design will be incorporated and materials used will compliment that of surrounding development. The design is described in more detail in this Masterplan.

Local Planning Framework

2.5.26 **Established Use** - NQY has an established lawful use as a civilian Airport approved through the Certificate of Lawful Use or Development Application 07/00217. This was determined on 10th August 2007 by Restormel Borough Council. This established that there are no planning restrictions on the use of the Airport, for example: opening times, capacity of use, noise generation, etc. This is the benchmark.

2.5.27 **Permitted Development** - Unlike privately owned airports, permitted development rights granted by Classes A, B, C and I of Part 18 of Schedule 2 to the Town and Country Planning (General Permitted Development) Order 1995, as amended through the Transport Act 2000 (Consequential Amendments) Order 2001 (the 'GPDO'), cannot be executed at NQY. This is because the Operator does not constitute a "relevant airport operator" under Part 18 as the Airport is owned by Cornwall Council and such rights do not accrue where airports are owned by a principal Council in England.

2.5.28 **Local Development Orders** - In 2010 it was decided to progress a Local Development Order to authorise development within Classes A, B and I of Part 18 of Schedule 2 of the GPDO. This provided similar planning powers to a GPDO and placed NQY on a level playing field with privately owned airports in England. The planning freedom delivered by the LDO was key as an inward investment tool so business can reduce the risks and uncertainty associated with traditional planning as well as cost and time.

2.5.29 The first Local Development Order was a vital tool for the Airport the key drivers for the Order were outlined, as shown below:

- To enable the Airport to operate on a level playing field with other privately owned airports in attracting business investment and carrying out operational developments
- To provide a comprehensive outline of all development that was permitted across the Airport, without the need for further formal planning permission
- To enable and facilitate economic development and allow growth to happen rapidly without further planning constraint

- To enable the Airport to respond accordingly to the requirements of operators, regulators and passengers to maintain high standards of service and safety
- Allows the operational Airport to remain competitive and reduce costs
- To establish a framework for the overall development on the airport which could promote and communicate a clear policy to stakeholders
- To build up confidence in and inform the community of future developments at the Airport
- To reduce the burden on the local planning authority, especially in dealing with applications for operational infrastructure that would otherwise be permitted development
- To improve the quality and sustainability of development, and
- To improve investor and occupier certainty and confidence

2.5.30 The Airport site now has two Local Development Orders (LDOs) which simplify planning procedures. An LDO provides a simplified planning regime by granting deemed planning permission for the types of development specified within it, and by doing so, removes the need for further planning applications to be made by the developer. The LDOs provide consent for over 200,000m^2 of development within the operational Airport and Business Park.

2.5.31 LDO 1 - Operational Airport (23.3ha): aerodrome operational land with direct access to the runway and the Airport. The LDO 1 was approved in July 2011. The LDO lasts for 20 years.

2.5.32 The LDO grants permission across the airfield and allows permitted development on operational land that is connected with the provision of services and facilities at the airport. The LDO also places limitations on developments that are permitted.

2.5.33 The LDO limitations are summarised as follows:

- The LDO defines development zones and scale of development allowed within them
- The LDO has a cumulative limit on operation buildings must not exceed 10 hectares
- The LDO includes a zone where no new buildings can be constructed without the need for express planning permission - highlighted orange - Northern Loop
- The LDO outlines height restrictions for operation buildings relative to the defined development zones as follows:
    - 20 metres from existing ground level in DZ1 &DZ2 highlighted green on plan
    - 6 metres from existing ground level in the Terminal Zone highlighted yellow on plan
    - 10 metres from existing ground level elsewhere within LDO Boundary

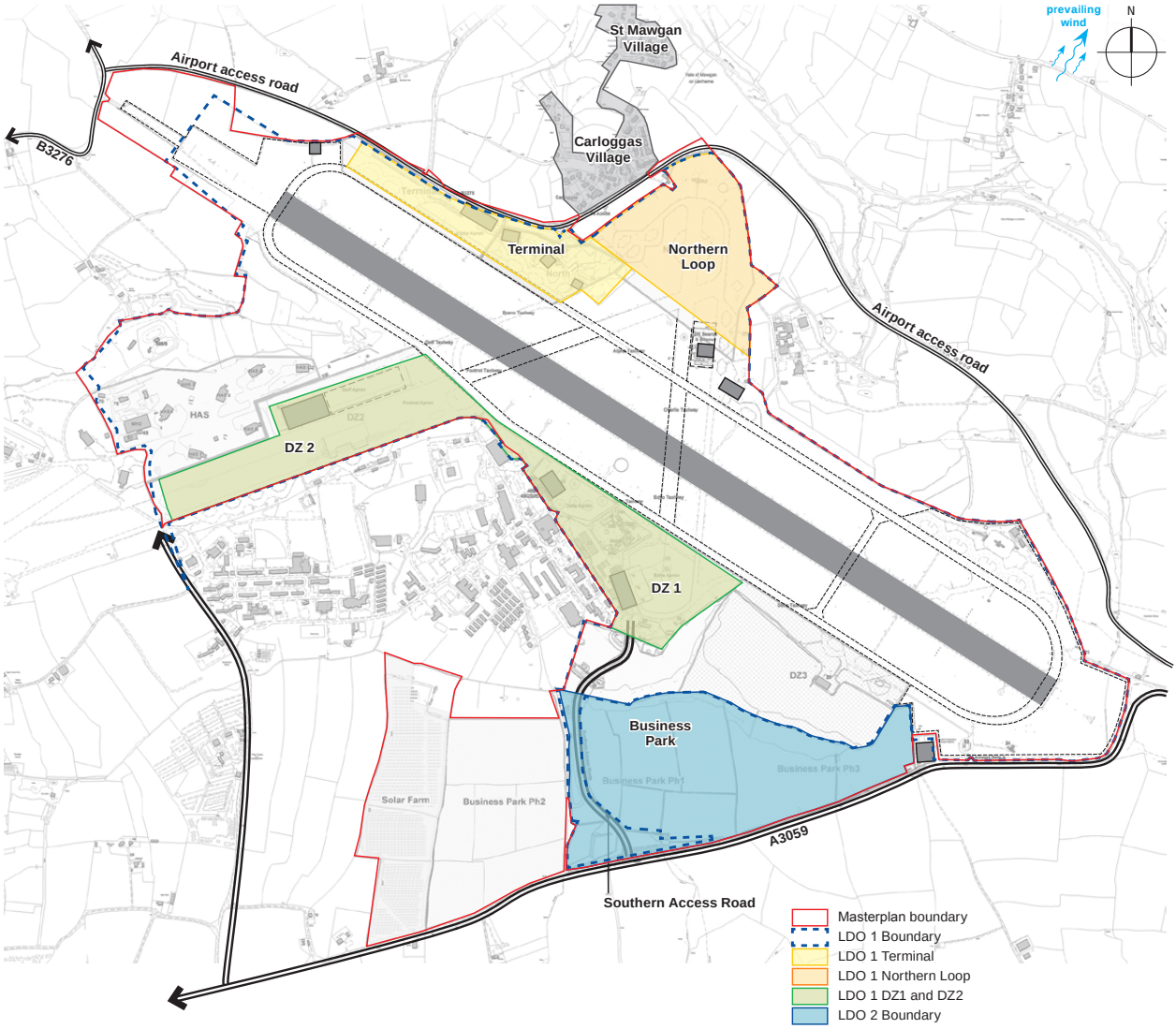


Figure 4 Local Development Order Boundaries

2.5.34 Development of the following is not permitted under the LDO1;

- Development outside the existing operational boundary are not permitted
- The construction or extension of a runway
- The construction of a passenger terminal
- Extension of the existing terminal exceeding 15%
- The erection of a building other than an operational building

2.5.35 **LDO 2 - Business Park (35.5ha)**: this will support the aerospace cluster by capturing spin-off activity and high value aerospace knowledge economy jobs that do not need 'airside' facilities. The Business Park is also expected to attract other high quality business and inward investment with over 200,000m^2 of employment space, offices and manufacturing. The Business Park will consist of use classes B1 (Business), B2 (General Industry) and B8 (Storage and Distribution), with associated infrastructure and ancillary hotel, retail and leisure facilities. The LDO 2 was approved in April 2013 and lasts for 20 years.

2.5.36 The permitted activity within the LDO 2 consists predominately of B1, B2 and B8 employment uses with associated infrastructure and also provides for a proportionate scale of ancillary activities such as hotel and retail that will help to ensure that the Aerohub Business Park works effectively in a sustainable manner.

2.5.37 There are conditions that development authorised through the LDO is required to comply with and ensure that any mitigation that is necessary to appropriately manage the impact of LDO development is delivered. In addition development is required to accord with Parameter Plans, a Delivery Plan and Design Codes which accompany the LDO and define matters such as where and how development should take place, what height it should be and what associated infrastructure and landscaping it will be required to provide.

2.5.38 There are two documents that should be referenced in detail; Statement of Reasons, produced by CC, which outline the reasons for making each of the LDOs. Each document includes restrictions applicable to the LDO, which are referenced on the CC planning website[13]. LDO1 restrictions are identified in section 1.5 of 'Local Development Order Statement of Reasons'[14]. LDO2 restrictions are identified in section 3.0 paragraph 4 of 'Aerohub Business Park Local Development Order Statement of Reasons'.[15]

Both these Statement of Reasons are referenced as appendices 14.29 and 14.30.

Land Outside the LDOs

2.5.39 Business Park West is outside the current LDOs. It is anticipated that as a long term project, further facilities will be developed over the next twenty years on land identified south of the Airport such as Business Park West.

2.5.40 Business Park West is located directly off the Southern Access Road and could provide additional serviced land with partial frontage onto the A3059. This area could be considered a more deliverable option for development in the long term and be brought forward before Business Park East, depending upon need.

2.5.41 The Northern Loop zone is located within the Airport boundary and has been included within the LDO. However, this has been purposely excluded as a potential development site to avoid future large scale development near to the village of Carloggas. This restriction is also aimed at encouraging use for development of the identified LDO zones which have direct access to the Airport aprons, taxiways and runway, as previously noted.

2.5.42 It is likely that the majority of developments associated with the Masterplan will be authorised through the LDOs. However significant alterations to the existing terminal or the construction of a new terminal are outside of the permitted developments within the LDOs and will therefore require formal planning permission.

13 http://www.cornwall.gov.uk/

14 www.cornwall.gov.uk/environment-and-planning/planning/local-development-orders/newquay-conrwall-airport-local-development-order

15 www.cornwall.gov.uk/environment-and-planning/planning/local-development-orders/newquay-cornwall-airport-aerohub-enterprise-zone-new-local-development-order


Display Maps Windows Colours Target Radar User
OUTBOUND 1740-1744
QDR
Test Osc
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3.0

Strategic Importance of Connectivity and Impacts

3.1 Cornwall Airport Newquay

3.1.1 Commercial air services have operated from NQY for more than forty years. Activities related to, and services delivered by, commercial air services result in a range of economic impacts. These include not only direct on-site employment from Airport operations, but also facilitate the arrival of tourists to Cornwall, improve business efficiency through shorter travel times compared to other modes of travel, as well as improve the perception of Cornwall's accessibility. All these activities help to attract investment and support new and existing business development in Cornwall (refer also to section 5).

3.2 How Connectivity Affects Growth

3.2.1 The Airport provides crucial transport links with London and other domestic destinations as well as other seasonal European and UK locations.

3.2.2 In June 2013 the Government announced a Public Service Obligation (PSO) fund to maintain important regional air connections to London, which included NQY. The importance of air links was illustrated over winter 2014 when the main rail line in/out of Cornwall collapsed into the sea. Air transport provided the resilience to Cornwall's transport infrastructure.

3.2.3 The four-year PSO contract from 2014 provides certainty to Cornwall. The funding guarantees that this aviation link continues to contribute millions of pounds to Cornwall's economy with over 100,000 passengers using this service every year (refer to section 4, Airport Growth Forecast)[16].

3.2.4 The service to the Isles of Scilly is also important, providing a year round lifeline link to the Islands. Since 2012, when Penzance Heliport closed, the Isles of Scilly are now left with four remaining links – the ferry service from Penzance and air services from Land's End, Exeter and NQY.

The likely impacts are highlighted in section 5.

3.3 Aerohub Enterprise Zone and the Aerospace Sector

3.3.1 The Aerohub EZ boundary includes land outside the Airport (covering the Business Park area) but, more crucially and uniquely in the UK, also includes airside land. This gives Aerohub a strong advantage as EZ benefits can be offered to companies that need to have direct access to the Airport's facilities.

3.3.2 The Airport needs to continue to manage and invest in its infrastructure to ensure the EZ is positioning itself as a key centre for aviation, aerospace and space sector growth.

3.3.3 Aerospace related investment opportunities have been a key focus for the Aerohub project.

Aerospace Growth Impact

3.3.4 The West of England is home to the largest aerospace cluster in Europe with more than 900 aerospace related companies in operation. Aerospace contributes £27.8 billion to the UK economy[17] and is one of the most diverse and capable aerospace regions in the world. Companies located in the West of England include: Airbus, Rolls-Royce, Lockheed Martin, GNK Aerospace, GE Aviation, BAE Systems, AgustaWestland Honeywell, Boeing and QinetiQ[18].

3.3.5 Cornwall is uniquely positioned in the south west and is home to global companies such as Agusta Westland, Bristow Helicopters Ltd and Lockheed Martin.

3.3.6 To achieve the aims of the Airport (as detailed in section 2, paragraphs 2.5.12–2.5.16) and

16 'Newquay Cornwall Airport Market Assessment & Traffic Forecasts', RDC Aviation, May 2013
17 Aero Industry Outlook, ADS, 2014
18 'Aerohub EZ @ Newquay Cornwall Airport - Market Assessment Report', RDC Aviation, Sept 2012, version 1.6, pg. 3

to attract aerospace growth, the Airport needs to continue to progress the Aerohub project by focusing on a number of key areas of activity. These include:

- The Investment Offer – developing the physical asset of the Airport in line with this Masterplan
- Sector and Investor Engagement – promoting the unique potential of the Airport and the opportunities for growth
- Skilled workforce – Engaging industry to bring together aerospace expertise

3.3.7 NQY's commitment to promoting the aerospace sector, investor engagement and developing a skilled workforce could boost its position as an aerospace hub. A detailed assessment of potential aerospace sectors where the Aerohub development should be focussed was identified by RDC in their report[18] (see Figure 5).

3.3.8 The West of England has a global reputation as a leader in aerospace technology. Aerohub provides a great opportunity to enhance this network and support further growth. This can be achieved through:

- Providing specialist, niche services for the aerospace sector, particularly if focusing on the segments of the aerospace industry that would find the offer most compelling in the context of global competition
- Acting as a centre of economic activity in Cornwall, with global businesses providing direct jobs related to aviation and aerospace
- Providing jobs in the aerospace supply chain through Small and Medium Size Enterprises (SMEs) and Original Equipment Manufacturers (OEMs)
- Promoting itself as the largest development opportunity in Cornwall, the likely impacts of such an approach are highlighted in section 5

Wider Economic Growth – Aerohub Business Park

3.3.9 The Airport offers an investment friendly business environment and the added benefit of a comprehensive LDO offering a planning free Development Zone. With an additional 24 hectares (53.5 acres) of development land outside the LDO, long term growth can be accommodated. These impacts were assessed within Roger Tym & Partners Market Assessment Report[19].

3.3.10 Given its locality, it is likely that the Aerohub Business Park will prove attractive to companies requiring easy access to fast transport links, links with aerospace and associated supply-chain activities (to support wider airside aerospace development), or a combination of the two. The likely impacts are highlighted in section 5 in particular 5.5.11.

19 'Aerohub Enterprise Zone @ Newquay Cornwall Airport - Market Assessment for the Aerohub Business Park', Roger Tym and Partners, May 2012

Figure 5 Potential Companies/Focus Segments for Aerohub Development (RDC[18], 2015)

Potential Companies/Focus Segments for Aerohub Development

Unmanned Aircraft Systems (UAS, e.g. Thales and BAE Systems):

Aerohub as a base for UAS testing and research, particularly maritime and civil airspace integration

Major South West companies are already involved with UAS development and ASTRAEA Programme. Aerohub can offer clear airspace for testing, and 'state of the art' navigational equipment might be of benefit to developing future UAS systems which can also operate in civil airspace.

Engines (e.g. Rolls-Royce/GE/Pratt and Whitney):

Aerohub as a base for engine testing, development and maintenance

Engine testing and development as a legacy from Bloodhound Project. Engine development for next-generation aircraft, tied in with significant additional aircraft orders being placed over the next 20 years.

Advanced Manufacturing (e.g. National Composites Centre/Exeter University CALM):

Aerohub as a regional centre for composite technology: manufacturing, research, composite maintenance, repair and overhaul (MRO)

Next-generation civilian aircraft are utilising more and more composite technology and the presence of the NCC in the South West should be taken advantage of to help support Original Equipment Manufacturer (OEMs) research and development in this sector. This has the potential to become a high value, niche sector for future support activity.

Airlines with large order books for next-generation aircraft (long-term):

Aerohub as a low cost solution for pilot training

Significant orders are expected for single-aisle aircraft over next 20 years, requiring additional pilot testing. NQY can offer significant advantages for this area of activity.

Maintenance, Repair and Overhaul (MRO):

Aerohub as an MRO facility for niche, high-value MRO

Niche aspects of MRO activity could be situated at Aerohub, such as interiors, modification and base/heavy maintenance (involving large-scale frame/systems maintenance). Composite MRO is likely to become an increasingly important sector as newer technology aircraft enter airline fleets and need ongoing support

Training and Simulation:

Aerohub as a base for training and simulation

Both military and civilian training & simulation activities are forecast to grow over the next decade. Aerohub is in a good position to build on existing activities in these sectors.


AIRBUS

4.0

Airport Passenger Growth Forecasts

4.1 Regional Approach

4.1.1 This Masterplan has served to answer the APF, through assessment of the Airport's assets, capacity and infrastructure, as well as providing a series of Development Zone options to encourage investment. These are based on capacity growth scenarios that align with DfT forecasts[20].

4.1.2 In response to, and support of these targets, the creation of the EZ, the production of a new Masterplan and the simplified planning framework will all serve as major contributors in encouraging investment, thereby supporting the Government's core belief that economic growth and job creation should be led by the private sector.

4.2 Cornwall Airport Newquay Aviation Capacity and Traffic Growth Forecast

4.2.1 The number of airline operators using the Airport in recent years has changed materially since 2008-09. With Airsouthwest and bmibaby both ceasing to trade and Ryanair withdrawing, Flybe is the new main provider of services. CAL route development strategy is focused on delivering connectivity to domestic and European business centres, outbound leisure and importantly inbound leisure opportunities.

4.2.2 While the recession of 2009–2013 saw NQY experience a decline in passengers, more recently stability in passenger numbers has been achieved. The temporary closure of main rail line highlighted the importance of maintaining the Airport as one element of a robust and resilient strategic transport network connecting Cornwall to the rest of the UK.

4.2.3 In 2014, the Airport handled 221,047 passengers[21], up 25% on the previous year. Growth is expected to continue, albeit at a slower rate. By 2030, 472,000 passengers are forecast, representing a Compound Annual Growth Rate (CAGR) of 4.9% from 2014. Figure 6 illustrates the passenger growth across 3 different scenarios – Base, Low & High. It also considers where the growth will come from e.g. domestic or international.

4.2.4 In terms of the Masterplan the base case scenario provides the basis for planning and impact assessment. Growth is expected on all route types, including the development of links to core European city destinations (and hub airports such as Amsterdam Schiphol), regions that will support inbound tourism growth (such as Germany and the Benelux region), as well as outbound leisure destinations for Cornish residents.

4.2.5 Approximately 88,000 passengers (44,000 visitors)[22] travelled to Cornwall in 2014 for leisure purposes. Spend on accommodation, food and drink, leisure attractions and other activities related to tourism in turn supports the wider economy. Visit Cornwall research[22] found that domestic visitors spend £1,213m and international visitors spend £130m in Cornwall per annum, resulting in an average spend of £298 per visitor.

4.2.6 Visitors travelling through the Airport support around 440 jobs in the wider local economy, spending around £13.2m and generating £9.1m worth of GVA in 2014[23]. This is expected to grow to more than 1,000 jobs, £31.7m spend and £22.0m worth of GVA by 2030. Business trips are estimated to generate £4.7m in GVA in 2014, rising to £11.5m by 2030.

4.2.7 The reduction in passenger numbers and other regional economic factors has greatly impacted on NQY's business plan. Five years from the original report, the 2015–2030 Masterplan has reassessed the forecast figures. In 2013, RDC Aviation produced a report[24] outlining the Airport's traffic forecast up to 2030, as shown across:

20 'Aviation Policy Framework', Department for Transport, March 2013
21 'Monthly UK Airport Statistics', CAA, 2014, (Table 9)
22 'Value of Tourism 2011', The South West Research Company, 2011
23 'Newquay Cornwall Airport Masterplan Economic Impact Assessment', RDC Aviation, June 2014
24 'Newquay Cornwall Airport Market Assessment & Forecasts', RDC Aviation, May 2013, pg62

Base scenario		2008	2014	2018	2030
Passengers, 000s	Domestic routes	329.0	191.4	246.7	325.9
Passengers, 000s	International routes	83.3	5.3	111.1	146.8
Passengers, 000s	Total (includes transit)	446.3	196.7	357.8	472.7
Low scenario		2008	2014	2018	2030
Passengers, 000s	Domestic routes	329.0	191.4	228.3	296.7
Passengers, 000s	International routes	83.3	5.3	56.2	73.1
Passengers, 000s	Total (includes transit)	446.3	196.7	284.6	369.8
High scenario		2008	2014	2018	2030
Passengers, 000s	Domestic routes	329.0	191.4	274.0	389.1
Passengers, 000s	International routes	83.3	5.3	148.4	210.7
Passengers, 000s	Total (includes transit)	446.3	196.7	422.4	599.8

Figure 6 NQY Passenger Forecasts Low/High Scenario Comparison Table

4.2.8 Their report included detail on key drivers and potential airline opportunities for Cornwall Airport Newquay in context of the:

- Operating environment
- Route development strategy
- Airport's management team
- Known short-term outlook

The resulting recommendations are based on trigger points of capacity and operational function, not time.

4.2.9 The new capacity headline forecast figures are as follows (passengers per annum):

Scenario	2015	2030
Base	**240,000**	**473,000**
Low	220,000	370,000
High	261,000	600,000

4.2.9a The graph below summarises the Base, Low and High scenario passenger forecasts for the period up to 2030[25]. Note there is a significant variance between the High and Low forecasts of 230,000 passengers.

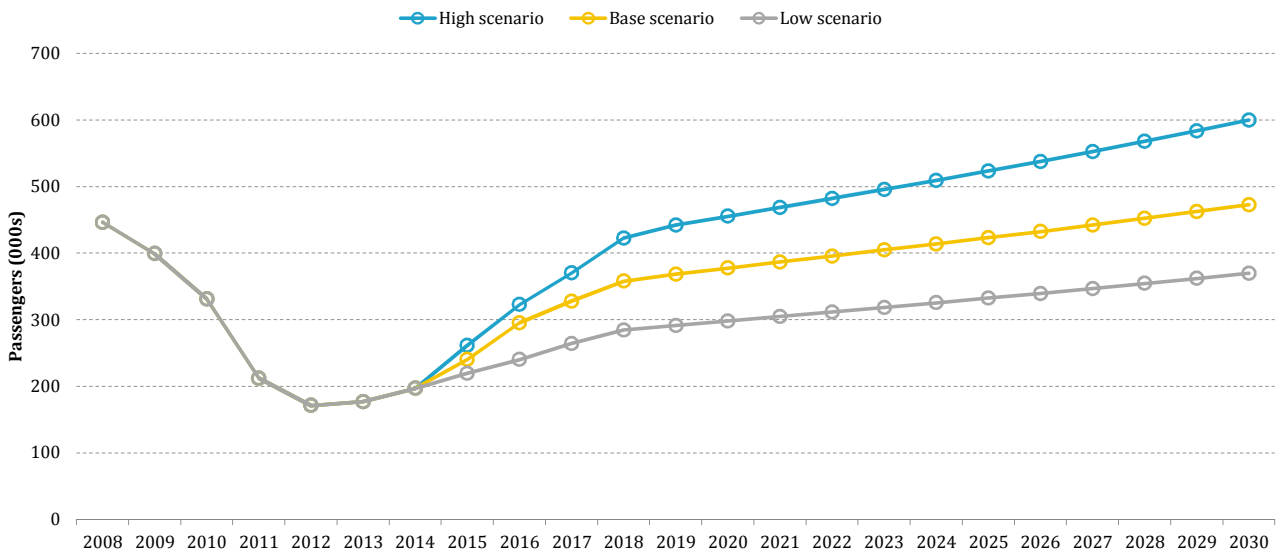


Figure 7 High base and low traffic forecast graph for Cornwall Airport Newquay

CONNECTIVITY TO
UK AIRPORT
HUBS

25 'Newquay Cornwall Airport Masterplan Economic Impact Assessment', RDC Aviation, June 2014

4.3 Terminal Capacity Study Summary

4.3.1 Through a review of the existing facilities, terminal layout, passenger capacity and the function for airside and landside areas, an assessment of all current and future Airport terminal issues were undertaken as part of the Masterplan. To manage projected passenger growth scenarios, various operational issues were identified and potential solutions proposed to increase the capacity at the existing terminal. It was assessed that, based on a comparison of values associated with the terminal improvement and/or expansion, costs increased to a point where the development of a new terminal was viable. The resulting Terminal Options Table (section 11.9) provides a visual indication of the urgency and importance of required changes based on capacity and not time.

4.3.2 The early cost appraisal and forecasting options therefore indicated benefits in simplifying the location options and focusing on the smaller, more practical steps needed to manage growth at the Airport. The Masterplan focused on the following Terminal development options:

- **(North)**

  Option 1a: Minor repairs only

  Option 1b: Minor refurbishment and expansion

  Option 1c: Expansion of existing location

- **(South)**

  Option 2: New southern terminal

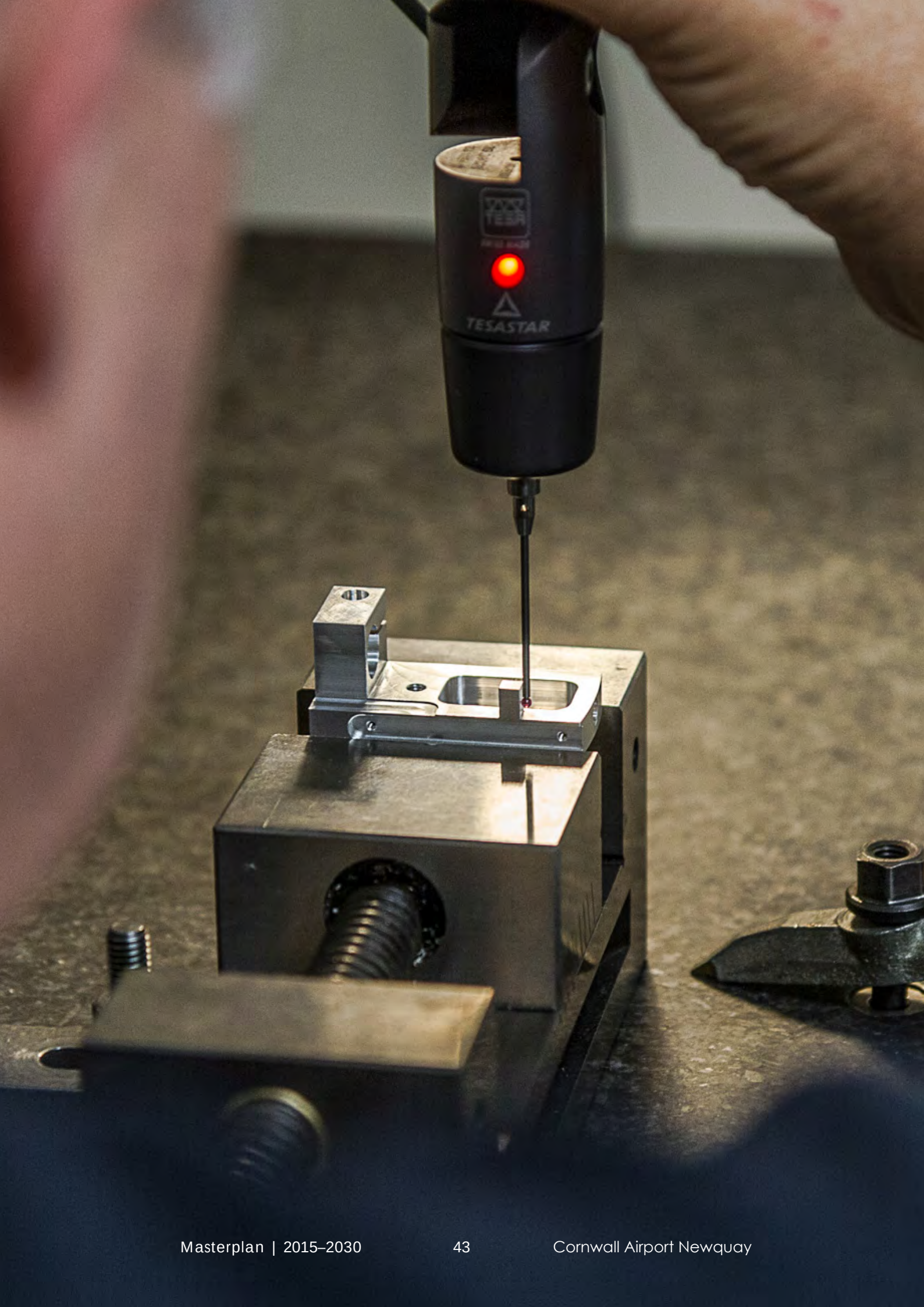
4.3.3 The simplified zones of a North or South option have been rationalised further where more cost certainty has been provided. The detail is based upon passenger capacity and the condition of the buildings.

4.3.4 The Terminal Options table captures the key issues of each option against potential development proposals to deal with those issues and is illustrated in section 11.0.

4.3.5 Based on this table a detailed cost breakdown has been provided. The table identifies trigger points where action is required to maintain the infrastructure necessary to ensure IATA terminal standards[26] are met and passenger growth opportunities are maximised.

4.3.6 This clear road map identifying terminal and infrastructure capacity measured against passenger growth provides the key to managing growth investment at the Airport.

26 www.iata.org – The reference is the IATA Terminal Design Manual which assess passenger comfort levels based on special requirements


TESASTAR

5.0
Economic Impact

5.1 Economic Impact Assessment

5.1.1 A full Economic Impact Assessment[27] was undertaken to support this plan and is included in the appendices. The following points provide summary of key facts reviewed.

5.1.2 The population of Cornwall and the Isles of Scilly has grown at a rate slightly above the regional and Great Britain national averages since 2001, but the growth has not been in the working-age population. Numbers have increased in non-working age groups, particularly the retired population.

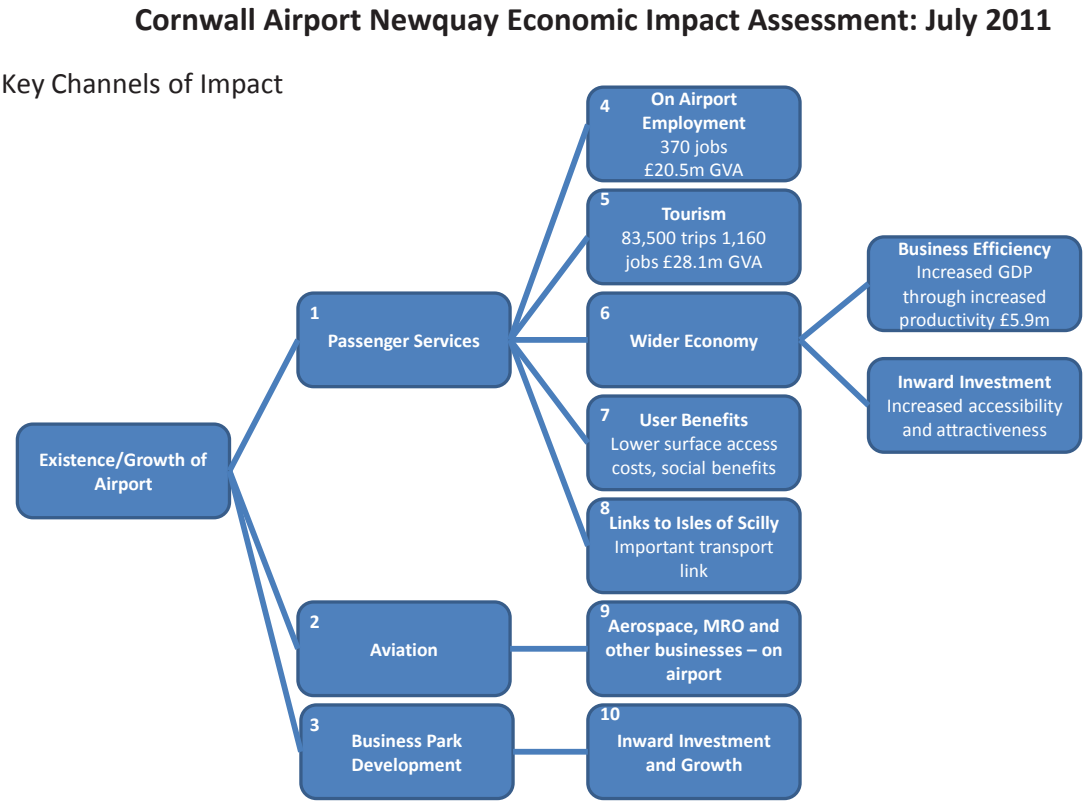


Figure 8 Key Channels of Impact - Cornwall Airport Newquay Impact Assessment - July 2011

5.1.3 There have been small variations in employment levels in Cornwall and the Isles of Scilly over the last 5 years, with levels at 190,611 in 2009, 248,300 in 2011 and just over 205,000 people employed in the area in 2012. In terms of the distribution of employment across industries the tourism industry (as represented by the accommodation and food sector) is an important source of employment in Cornwall (providing 14.3% of employment) and the Isles of Scilly (providing 50.0%) relative to the South West (at just 8.9%)[28], a lower proportion of employment in Cornwall (9.0%) and the Isles of Scilly (0.01%) is provided by business administration and support services, and professional, scientific and technical service activities relative to the South West (12.8%). These tend to be higher value, higher skilled activities.[28]

27 'Newquay Cornwall Airport Masterplan Economic Impact Assessment', RDC Aviation, June 2014
28 'Annual Survey of Hours and Earnings 2014 Provisional Results', Office for National Statistics, 19 November 2014

5.1.4 Earnings in Cornwall, as identified by The Office of National Statistics[28], remain below the national average at £17,344 per annum against an average across the UK of £27,200 per annum. Regional GVA per head in Cornwall and Isles of Scilly is only 65.8 % of the UK value[29] . These figures suggest that the growth in employment has been in lower paid, low productivity activities.

5.1.5 The analysis identifies that while Cornwall and the Isles of Scilly have maintained employment growth, the growth is not likely to transform the economy into a high-skill, high-value economy. It confirms the need for economic development as outlined in Cornwall Council's Economy and Culture Strategy 2013–2020 published on September 2013. Aerohub signifies an important change in the composition of a highly skilled jobs site salaries are on average 50% higher than the Cornwall mean as indicated above. [27]

5.2 Local Business Community

5.2.1 The Airport is seen as very important for business, making travel easier and quicker.

5.2.2 Over a month long period in January-February 2013, an online survey was hosted by RDC Aviation to gather opinions from local businesses and potential/current users on Cornwall Airport Newquay a total of 379 people responded to the survey over a one-month period. The key conclusions:

- Overall, 35% of survey respondents are using Cornwall Airport Newquay for business use, with the remaining 65% split between leisure and Visiting Friends and Relatives (VFR)
- Based on the passenger forecast for 2013 (176,700), the level of outbound travel (i.e. that which originates in Cornwall; c.45%) and the level of reported business use, around 27,000 outbound passengers will be travelling for business (13,500 business trips) in 2013
- The most important factors in determining whether people use an air service are if the route serves the region most travelled to/from for business purposes and the provision of a range of short and long haul connections being available at that airport – both these factors scored over 85% importance levels
- 55% of business travellers use Cornwall Airport Newquay three or more times per annum
- In terms of importance of London airport to business activity (either current or potential importance), Gatwick was currently rated the most valuable (which may be as a result of the fact that businesses do current rely on that service for accessing the city) – closely behind Gatwick, Heathrow was cited as the next most important airport for services
- London and the South East was cited as the most commonly travelled to region by survey respondents, with 90% making at least one return trip in a typical year

5.2.3 A high proportion of the business community consider the Airport as vital to business growth, some acknowledge the benefit in the potential time savings, while others see indirect impacts as being more beneficial. Recent studies undertaken by the Cornwall Chamber of Commerce and the Federation of Small Business (Cornwall) showed that over 75% considered the Airport as essential.

5.2.4 The survey[28] assessed the importance of air services. The most important factors in determining whether people use the Airport are:

- The route serves the region most travelled to/from for business purposes, and
- The provision of a range of short and long haul connections

29 'Regional Gross Value Added (Income Approach)', Office for National Statistics, December 2014, table 2

5.2.5 Both these factors scored over 85% importance levels. From a social perspective, the importance of passenger air services for contact with friends and family and also for leisure related reasons, ranked highly (70% important/very important).

5.3 Tourism

5.3.1 Cornwall is a major UK tourism destination, particularly for domestic visitors and some key overseas markets (e.g. Germany). Cornwall remains the fourth most visited location in the UK for domestic tourists, accounting for more than 4m visitors per annum[30].

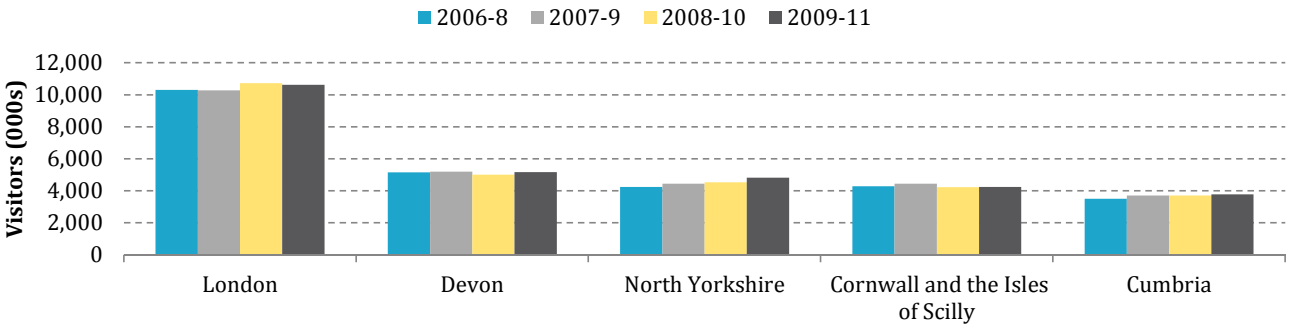


Figure 9 Top Five Domestic Regional Destinations for Tourists [30]

5.3.2 In addition to domestic tourism – and important to the Airport both now and in the future – there have been some positive signs of growth in international tourism to Cornwall and the Isles of Scilly, driven mainly by an increase in German visitors.

5.3.3 Sectors related to tourism employ a large share of the working-age population in Cornwall and the Isles of Scilly. Visitor spend supports the wider economy in terms of accommodation, food and drink, leisure attractions and other areas related to tourism.

5.3.4 Each visitor to Cornwall travelling through the Airport was on average responsible for £207 of GVA[31] in the wider economy. Based on this research, the visitors travelling through the Airport support around 440 jobs in the wider local economy, spending around £13.2m and generating £9.1m worth of GVA in 2014. This is expected to grow to more than 1,000 jobs, £31.7m of spend and £22.0m worth of GVA by 2030.

30 'Newquay Cornwall Airport Masterplan Economic Impact Assessment', RDC Aviation, June 2014
31 'Newquay Cornwall Airport Masterplan Economic Impact Assessment', RDC Aviation, June 2014

5.4 Aerohub – Aerospace and Wider Industry

5.4.1 The sector-specific focus could generate high-value employment in the region, with more specific aviation profession salaries earned. According to data from the UK Aerospace Industry Survey[32], average aerospace salaries are some 50% higher than the UK gross mean weekly salary.

5.4.2 By 2030 it has been estimated that the EZ will grow as follows[33]:

- Over a 1,000 jobs and £76m of GVA within the EZ Zones 1-3
- Over 1200 jobs and £86m of GVA in Phase 1 of the Business Park

More detailed evidence of growth figures is detailed in sections 5 and 6 of the Economic Impact Assessment, appendix 14.24.

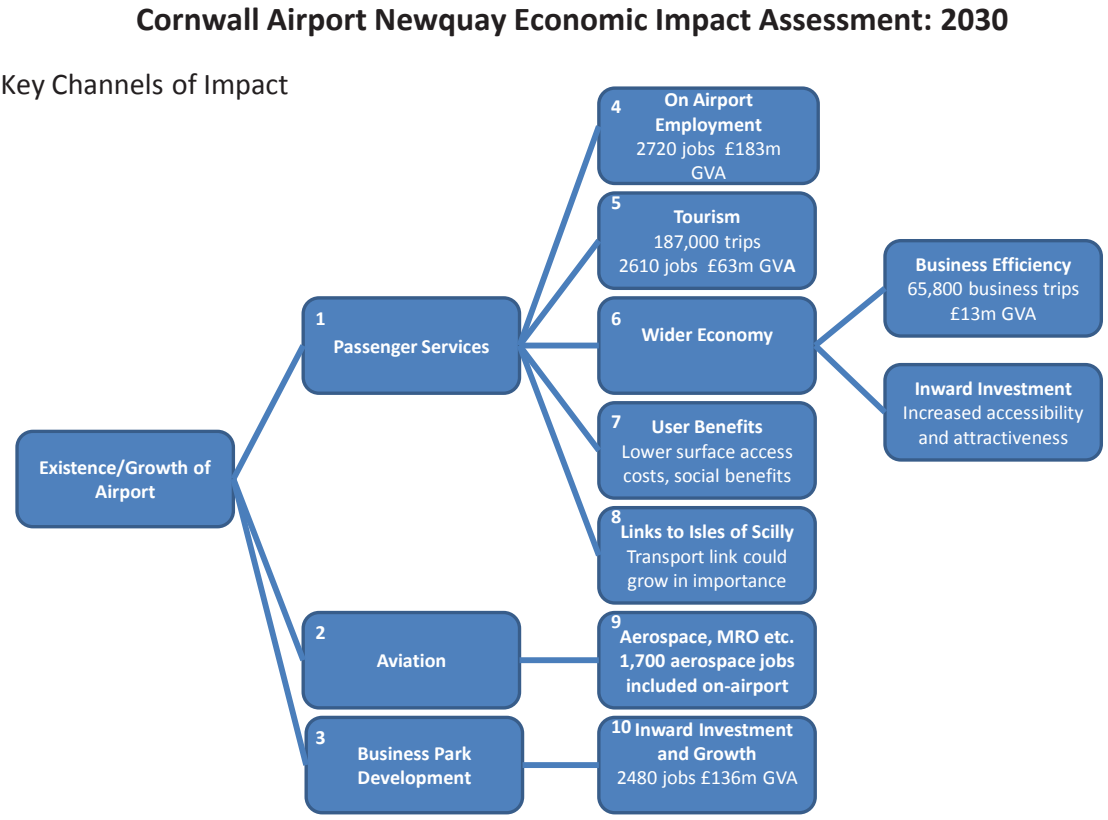


Figure 10 Cornwall Airport Newquay Economic Impact Assessment: 2030 - Key Channels of Impact

32 'Aerospace Industry Oulook', ADS Group, 2014

33 'Aerohub Enterprise Zone @ Newquay Cornwall Airport – Market Assessment for the Aerohub Business Park', Roger Tym and Partners, May 2012

5.5 Property Market Review and Analysis

5.5.1 A detailed property market review[33] provided information on potential uses of the land together with potential land values and development opportunities at NQY.

5.5.2 It is vital to understand the general market conditions and key delivery and development issues before looking more specifically at land within the Airport boundary.

Market Viability

5.5.3 Cornwall has had a long history of lack of supply due to commercial development viability. The reason for the lack of market provision is construction cost (including land cost and profit) usually exceeds the final building's value, which produces a cost–value gap. There are numerous factors that create this cost–value gap:

- Net construction costs are higher in Cornwall than elsewhere, partly due to:
  - the remote location and associated cost of transporting materials
  - the developer and construction capacity creating uncompetitive market conditions
- Services are more remote and can add to the cost of construction
- Upward pressures on construction costs (raw materials and labour)
- Rental and capital values remain low and have not increased proportionate to construction costs
- Property returns and investment values have been affected by the recession and have been slow to recover
- Tenant covenant strengths vary; affecting returns required and restricting investment values
- Lease lengths are generally shorter affecting security of income, which in turn affects capital values

Aerospace Cluster

5.5.4 The EZ has enabled a number of benefits to be offered to new businesses. The EZ will act as a catalyst for further investment, which in turn will support business growth need.

Particular benefits that NQY, within its EZ, will provide include:

- Higher rental and capital values are anticipated, as has been evidenced in other EZs specifically referred to in the Roger Tym report[34]
- Incentives, which could help drive demand and values
- LDOs which will reduce costs and risks of delivery
- Attract higher value companies over time – as identified in section 3.3, this is a highly important sector for the South West of England and as a direct result it is anticipated that through a positive marketing campaign higher value companies could be attracted to the site
- Long-term investment support that improves investment environment

34 'Aerohub Enterprise Zone @ Newquay Cornwall Airport – Market Assessment for the Aerohub Business Park', Roger Tym and Partners, May 2012

- An Airport location within an aviation business cluster that adds value through shared investment benefits and skill sharing
- EZ rates retentions which could fund and facilitate development

5.5.5 In addition Cornwall has benefited from ERDF and other public sector grant funding. These funding streams have assisted in enabling development to take place by funding the cost–value gap. Without such assistance it is likely that development of high-quality space would reduce.

Demand and Supply

5.5.6 An Employment Land Review[35] undertaken in 2010 indicated significant areas of commercial development land available across Cornwall. Indications from the assessment of the deliverability of undeveloped sites detailed in the report are that the five-year supply of office premises is in the range of 11 to 59 hectares, whilst the supply of industrial premises is between 40 and 88 hectares, depending on the split of office/industrial premises on mixed-use sites. Across Cornwall, there is estimated to be around 98 hectares of land deliverable within the next five years, which is significantly more than the 50 hectares required.

5.5.7 However, take-up rates have been slower than anticipated, and this is in part due to recent market conditions and the economic downturn, albeit the economy is now growing.

5.5.8 The demand for employment land relies on sites that are actually serviced, accessed with development constraints minimised and ready to be developed. Recent examples such as the newly constructed Quintdown Business Park, Quintrell Downs, Newquay have proven successful with the workspace being sold or let shortly after completion in 2014. Elsewhere, Cornwall Business Park near Redruth has recently been completed and disposals are progressing well, and land has recently been sold at both Treleigh Industrial Estate and Tolvaddon Energy Park – both of which have seen new high-quality business premises being delivered to the market. As a result, it appears that well-serviced and well-located employment land is in good demand. Therefore, a supply of well-located and fully serviced sites is required to enable business growth, both immediately and in the future, hence the long-term provision of land proposed on the south side of the Airport to support this need.

5.5.9 Until now there has not been a supply of such sites at the Airport, but it is anticipated that along with the Aerohub Business Park, the individual Development Zones will be able to offer unique opportunities to interested investors and business.

5.5.10 There has been a longstanding and recognised need for the provision of high-quality workspace across Cornwall and this is reinforced by the development sites mentioned above and others throughout Cornwall where occupancy levels are high (100% at QuintDown). Whilst latent demand is difficult to predict, it is expected to be strong for high-quality, flexible business space in the right location – like the Aerohub Business Park.

5.5.11 A market-assessment report for the Aerohub Business Park undertaken by Roger Tym and Partners in 2012[35] arrived at the following conclusions:

- NQY is recognised as a strong driver of future prosperity in Cornwall
- Aerohub represents an opportunity for Cornwall to create its own aerospace and associated industries cluster
- EZ financial advantages and streamlined planning processes are important incentives, attractive to target sectors that have strong potential for growth

35 'Cornwall Employment Land Review', Nathaniel Lichfield and Partners July 2010

- In the EZ rental values could command an uplift of some 5–10% above local rates over time; however some initial incentives such as rent-free periods are likely to be required
- Sectors encouraged and permitted to locate at Aerohub should be defined as broadly as possibly to encourage maximum interest from private developers
- Plots should be available for lease or freehold purchase

5.5.12 The Aerohub Business Park will therefore provide a ready supply of serviced development plots to cater for demand for modern workspace in an area that has previously suffered from a lack of supply.

Airport as a Demand or Value Driver

5.5.13 It is anticipated that the Airport could be a unique opportunity for certain businesses that require links to the aviation industry and/or direct access to the runway or require a location close to the Airport and the connectivity it provides. As identified in the Market Assessment for the Aerohub Business Park report35, the Airport is recognised as a strong driver of future prosperity in Cornwall and combined with EZ status this could act as a real catalyst for demand and for Cornwall to create its own aerospace and associated industries cluster. The UK's aerospace industry is one of the most important manufacturing sectors in the country and the south–west already has a significant cluster that can be built upon. It is anticipated that due to the unique offering at the Airport, that new business can be attracted and in terms of land sale prices and capital/rental values higher values could be achieved (5–10%)[35].

Sector Demand

5.5.14 Being able to locate on or close to an operational airport can have significant benefits to aviation based businesses, such as the availability of a local skilled workforce or for air transportation requirements. We have identified in this section and through the Airport Market Assessment for the Aerohub Business Park report[34] that the EZ offers a number of significant benefits, some of which are unique.

5.5.15 Building on the important cluster development on the south side, combined with the recently approved ERDF infrastructure project to open up and service the Aerohub Business Park, it is difficult to justify additional new development to the north. The Northern Loop should be secondary to the land to the south, and the principle development focus should be to make the Aerohub Business Park and surrounding zones successful by building critical mass. There will be development opportunities that arise in the north which should be dealt with on their own individual merits as and when they arise. These opportunities within the Northern Loop are unlikely to provide a significant windfall in terms of capital or revenue income.

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FIRE

6.0

Safeguarding Airport Operations

6.1 Aerodrome Safeguarding

6.1.1 Aerodrome Safeguarding is the process used to ensure that the areas in and around NQY are protected, as far as reasonably possible, against any development which would cause unacceptable risks to air traffic services, navigation equipment or facilities.

6.1.2 The Airport Operator is required to lodge its aerodrome safeguarding map with the Local Planning Authority (refer to appendix 14.31) which illustrates all CAA safeguarding assets and criteria at ground level around the aerodrome. The plan below shows the zones immediately surrounding the Airport.

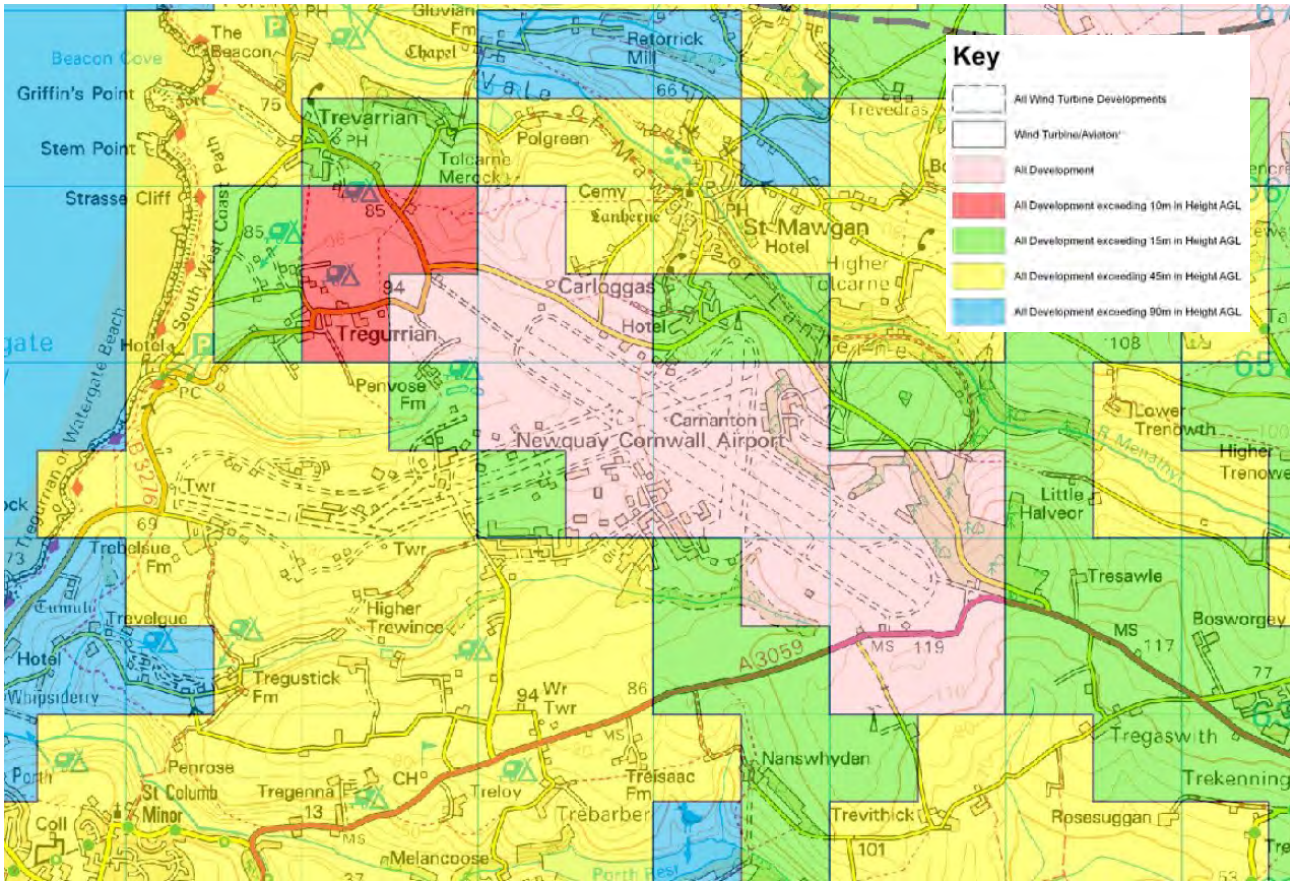

Figure 11 NQY Local Safeguarding Zone

6.1.3 A navigational aid safeguarding plan related to runway safeguarding equipment is included in appendix 14.32. It not only covers the aerodrome protected surfaces but also technical site safeguarding of ATC.

6.1.4 The physical site safeguarded surfaces are defined by the CAA in CAP168 Licencing of Aerodrome and comprise:

- Taxiway (incl. Taxiway strip), taxi lane and stand clearances
- Runway Strip (which encloses a runway and any associated stop-way and includes a cleared and graded area)
- Clearway
- Runway End Safety Area
- Take-off Climb Surfaces
- Approach Surface
- Transitional Surface
- Inner Horizontal Surface
- Conical Surface
- Outer Horizontal Surface
- Obstacle Free Zone

The technical equipment sites at the Airport that also require safeguarding include:

- ASR (Aerodrome Surveillance Radar)
- ILS (Instrument Landing System) localiser and glide path (Critical areas, sensitive areas and safeguarded surfaces)
- DME (Distance Measuring Equipment)
- VDF (VHF Direction Finder)
- NDB (Non-Directional Beacon)
- Radio Receivers and Transmitters

6.2 CAA Requirements and Future Provisions

6.2.1 All areas within the Airport licensed area are subject to CAA regulations and safety guidance and as such must be managed in accordance with the regulations.

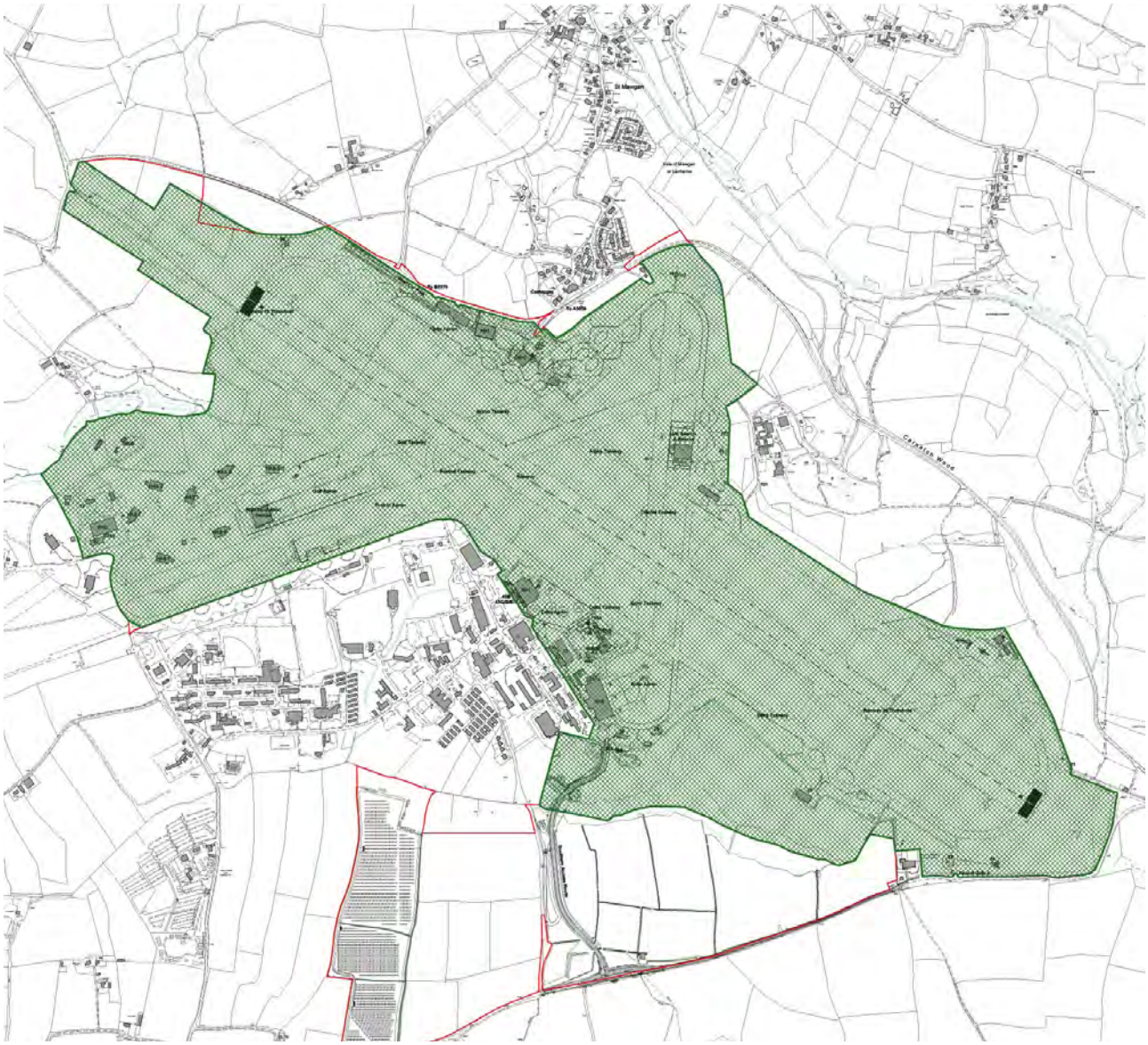

Figure 12 Cornwall Airport Newquay CAA Licence Plan

6.2.2 Safeguarded zones under the approach and take-off paths at either end of the runway are restricted from development through CAA regulation. The size and nature of development in close proximity to the airfield is also restricted to ensure no conflict exists with the safe operation of the airfield. These constraints have been considered as part of the Development Zone planning.

6.2.3 Any proposed future development within the airfield zone or next to the Airport must therefore take into account specific issues, which include:

- ILS / CAT III runway safeguarding requirements
- CAP 168 requirements
- Aerodrome physical characteristics
- Bird control management
- Public safety zone
- Radar interference
- Noise-reduction measures to address background noise
- Landscape baffles
- Sound attenuation within naturally ventilated buildings, and
- Glazing specification

6.2.4 Within the Masterplan, each of the Development Zone Framework plans illustrates safeguarding restrictions that are applicable to their location. See section 11.0 for detail.

6.2.5 More general planning and legal restrictions and influences that have an impact on the Airport and its future development will also affect the frameworks for each of the identified Development Zones.

These include but are not limited to:

- Landscape designations
- Ecological designations
- Historic Environment
- • MoD restrictions on use
- • Neighbouring land title ownership, covenants, local population and parishes

6.2.6 As part of the future development of the Airport, mitigation measures required to address these areas should be dealt with as part of any separate detailed delivery project.

7.0

Infrastructure

7.1 Constraints

7.1.2 To enable an assessment to be made of the existing infrastructure within each Development Zone, the infrastructure within the Airport has been categorised into the following headings:

- Physical Site – capturing topographical information and physical location
- Access Infrastructure – identifying means of access to the Development Zone and connectivity from within it
- Services Infrastructure – identifying utility services to the site and connectivity from it
- Drainage Infrastructure – identifying services and drainage within and away from each zone
- Runway / Aviation – listing of access to and from aprons, taxiways, and the runway
- Property / Building Assets – condition surveys and identification of built assets on site.

Environmental:

- Landscape – recording of special features and characteristics
- Ecological – recording of special features and characteristics
- Historical – recording of special features and characteristics

7.1.3 The infrastructure constraints and opportunities for each Development Zone are listed within the Development Zone conditions table in section 11.0. Additionally, a summary of the environmental constraints is provided to capture the key environmental issues within the Masterplan boundary and its immediate surroundings (refer to appendix 14.1).

7.1.4 Other land use constraints consist of covenants that restrict development close to the Cornwall Air Ambulance Trust facility located to the east of Development Zone 3.The rotary-wing flight path has a protected safety zone and is illustrated on the Development Zone 3 plan (refer to section 11.0).

7.1.5 Adjacent land use and other sites not in CC ownership include the landing lights outside of the immediate site boundary, both to the east beyond the A3059 and to the west within the neighbouring field.

7.1.6 The Solar Farm located to the west of Business Park West is owned by Cornwall Council, and presents no constraints to flight or commercial operations.

7.1.7 To the south of the Northern Loop, a 2 acre plot of land was sold to Bristow, on which has been built the UK Search and Rescue facility.

7.2 Assessment Categories

7.2.1 A number of categories were used to inform our analysis for development of the Airport. These categories included:

- Physical Site
- Access
- Services
- Drainage
- Airport Infrastructure
- Property / Building Assets
- Landscape and Ecology
- Historic Environment
- Archaeology and mapping of services

7.3 Building Condition Survey

7.3.1 An assessment of the Airport infrastructure and condition surveys were undertaken of the key operational buildings that required them. The following building summaries refer to the condition survey work undertaken. Each full report is included within appendix 14.22.

Terminal

7.3.2 Generally the building is in a good state of repair. Staff facilities are poor in places and need improvement. Further improvements to building management systems will need to be carried out. The terminal building is in a good structural and decorative order. A few immediate repairs are required to ensure the structure remains in a good operational condition. The building should remain serviceable for a further thirty years before any further major works are required.

Fuel Farm

7.3.3 This has recently been upgraded, and on the whole is in good condition and is regularly maintained.

North Hangar 1 and 2 (NH1 & NH2)

7.3.4 NH1 and NH2 are in a good condition and no major defects were noted. The walls and roof cladding typically have a lifespan between twenty-five and forty years, but this is dependent on the exact product used. Despite this, the walls and roof should be operational for a further ten to thirty years and the steel frame can achieve a lifespan of up to eighty years.

Air Traffic Control Tower (ATC)

7.3.5 The ATC Tower is in a good condition internally and should remain operational for a further thirty to forty years providing that routine maintenance is sustained.

Airport Fire Service Station (AFSS)

7.3.6 The AFSS was completed in 2009 and has not been surveyed as part of this Masterplan. It is in an excellent condition throughout.

7.3.7 In conclusion all operationally active buildings are in a good state of repair and continue to provide adequate/good provision for the services they deliver.

7.4 Car Parking

7.4.1 A total of 500 public parking spaces are available (including 50 car hire and 14 disabled spaces). Average utilisation is around 42% in winter and 79% in summer.

7.4.2 Based on the terminal development options which have been considered, the strategy for parking capacity and its arrangement within the terminal zone has been defined as:

- Remodel existing parking to accommodate growth and reduce passenger walking distances. This could include infrastructure work to include a covered walkway to improve the passenger experience.
- Provide new parking areas to accommodate further growth, improved convenience and pedestrian shelter in transit to terminal.
- Expanded parking strategy within terminal and north zones to serve a larger terminal.

7.4.3 Car parking capacity will therefore need to be carefully monitored and, if required, additional land made available in the west car park, which in turn will contribute to revenue. Land should be identified for this future growth scenario and additional car parking zones have been identified within the Development Zone Framework.


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8.0

Surface Access Strategy

8.1 Summary View

8.1.1 An Airport Surface Access Strategy (ASAS) (appendix 14.9) has been prepared to support the Masterplan and presents a strategy for current and future transport operations at the Airport. The ASAS considers existing and future surface access arrangements at the Airport (including the Aerohub Business Park) and seeks to increase the proportion of journeys made by public transport, walking and cycling in line with the Aviation Policy Framework.

8.1.2 To help deliver these aims, the Airport is committed to the following transport aims:

- Working with the Airport Transport Forum (ATF) to deliver easy and reliable surface access, to increase use of sustainable modes, and to minimise congestion and other local impacts
- Building on the Airport's function as an EZ to improve public transport access between Newquay town and rail station, Newquay Growth Area (NGA) and the Airport
- Setting challenging targets for reducing dependence on the private car
- Identifying measures to encourage greater use of public transport and more sustainable travel behaviour
- Monitoring progress against targets and reporting annually

8.1.3 The transport aims, and a comprehensive review of the current transport issues facing the Airport, have enabled short and long term transport strategies to be developed. These strategies have been further informed, by reviewing national and local transport policy, regular engagement with the Airport Transport Forum and also setting forward targets for mode share.

The strategies are outlined fully in the ASAS, which should be read in conjunction with this document.

Airport Masterplan Access Strategy					
Masterplan Area		Vehicle Access/ Parking	Bus Access	Cycle Access	Walk Access
1	Development Zone 1 (DZ1)	Access via extension to SAR Parking to be provided in line CC guidance, demand and mode share targets	Bus access by services on A3059 Potential to provide bus access via Loop Road longer term	Access via SAR extension Cycle parking to be provided in line with CC guidelines	Access via SAR extension with dedicated footway
2	Development Zone 2 (DZ2)	Access via extension to SAR Parking to be provided in line CC guidance, demand and mode share targets	Bus access by services on A3059 Potential to provide bus access as far as DZ1 via Loop Road longer term	Access via SAR extension Cycle parking to be provided in line with CC guidelines	Access via SAR extension with dedicated footway
3	Development Zone 3 (DZ3)	Access via extension to SAR Parking to be provided in line CC guidance, demand and mode share targets	Bus access by services on A3059 Potential to provide bus access via Loop Road longer term	Access via SAR extension Cycle parking to be provided in line with CC guidelines	Access via SAR extension with dedicated footway
4	HAS Area of historic value	Access via SAR extension via DZ2 Parking to be provided in line CC guidance, demand and mode share targets	Bus access by services on A3059 Potential to provide access as far as DZ1 via Loop Road longer term	Access via SAR extension via DZ2 Cycle parking to be provided in line with CC guidelines	Access via SAR extension via DZ2 with dedicated footway
5	Terminal	As per existing via Ball Lane Parking to be expanded in line CC guidance, demand and mode share targets	Bus access as per existing Relocation of the bus stand to outside the arrivals exit	As per existing via Ball Lane Cycle parking to be provided in line with CC guidelines	As per existing via Ball Lane
6	North Potential for Terminal/North Zone expansion Potential for North Zone expansion	Access via Ball Lane and new inner Loop Road Parking to be provided in line CC guidance, demand and mode share targets	As per Terminal	As per Terminal	As per Terminal
7	Northern Loop Potential for Terminal/North Zone expansion Potential for North Zone expansion	Access via Ball Lane and new inner Loop Road Parking to be provided in line CC guidance, demand and mode share targets	As per Terminal	As per Terminal	As per Terminal

8.2 Access Strategy

8.2.1 The table below shows the access considerations which have been developed to serve the various development parcels, showing each of the access modes and parking issues.

NQY will work with the ATF over the course of the ASAS period to develop, implement and refine these actions in line with Airport growth and associated development. Refer to Airport Surface Access Strategy, appendix 14.9.

ASAS Action Plan – Up to 400,000 ppa and 1,500 Aerohub employees		
Measure Ref.	Location	Location
S1	Relocate the existing bus stand to a more prominent location outside the arrivals exit.	Terminal
S2	Work with the public transport operators to promote existing bus services, explore through ticketing options and promote bus information within the Terminal and Aerohub.	Terminal, Aerohub and on flight
S3	Work with Cornwall Council (CC) to implement a new footway connecting Carloggas and the Airport access.	Ball Lane
S4	Implement a staff travel plan to cover the Airport and the Aerohub. This should include measures such as improvements to cycle facilities and introduction of a formal lift share scheme.	Terminal and Aerohub
S5	Work with CC to review and alter signage to discourage travel via the B3276 coastal route.	Ball Lane (at Terminal access)
S6	Work with local communities and CC to consider traffic calming measures along the B3276 to discourage traffic on this coastal route.	B3276
S7	Work with CC to monitor traffic flows and operation of key highway junctions including the Airport access and A3059/Ball Lane.	Highway network

ASAS Action Plan – Up to 600,000 ppa and 5,000 Aerohub employees		
Measure Ref.	Location	Location
L1	Explore potential to create an internal loop road from the A3059 to serve the southern side of the Airport to encourage direct bus access to this area.	Southern side of Airport
L2	Support the bus operators in monitoring bus demand with a view to increasing existing bus frequency and/or introducing new bus services (including consideration of a Park and Ride service).	Terminal and Aerohub
L3	Work with CC to implement cycle measures (e.g. a cycleway) on the A3059 to connect the Aerohub to the NCN32.	Terminal and on flight
L4	Monitor and evolve the Staff Travel Plan. Long term measures may include consideration of a staff shuttle.	Ball Lane
L5	Increase passenger and staff parking, and car hire provision in line with demand and mode share targets.	Terminal and Aerohub
L6	Work with CC to monitor traffic flows and operation of key highway junctions including the Airport access and A3059/Ball Lane.	Highway network

9.0
Environmental Impact Summary

9.1 Sustainability Appraisal Summary

9.1.1 This revised Masterplan reflects a reduced passenger forecast, in addition to a number of new economic opportunities. A Sustainability Appraisal (SA) has been undertaken, so that environmental and social aspects are taken into account during its development and to ensure the supporting evidence base is robust. This will enable the Masterplan to be afforded sufficient weight in supporting developments at the Airport. This report sets out the results of the SA.

9.1.2 The SA is undertaken through a number of steps:

- A 'scoping stage' was undertaken which set out the method to be used for the sustainability appraisal, related plans and the baseline environmental, social and economic conditions – a scoping report was produced and issued to key consultees, such as statutory environmental bodies
- The baseline conditions were reviewed to determine key constraints and opportunities for Masterplan development – the baseline was used to develop a set of criteria against which the Masterplan was assessed
- Potential locations for a terminal were assessed using these SA criteria, the Development Zones were also assessed individually throughout the masterplanning process – the assessment determined whether there were any likely positive or negative effects on sustainability grounds
- Where possible, the planning of the Development Zones avoids negative effects and maximises positive effects – where this is not possible in the Masterplan, further mitigation and enhancements have been proposed, in addition to a method for monitoring these effects.

Baseline

9.1.3 There are a number of villages, hamlets and isolated dwellings located in close proximity to the Airport. Newquay is the largest settlement in the area. Newquay and surrounding parishes perform poorly on the selected health and wellbeing indicators, both relative to the rest of Cornwall, and when compared to the UK as a whole. There are fewer economically active people and they are in lower-skilled or part time jobs. Tourism is an important part of the local economy and relies on Newquay's coastal environment.

9.1.4 It is planned that Newquay will be the recipient of significant growth and investment over the next 15 years. 'Nansledan' is an urban extension to the east of Newquay and is planned to provide up to 3,750 homes as well as other uses. The designation of the EZ and associated developments is expected to provide up to 5,000 jobs for the local area. Considerations for the Masterplan comprise maximising future potential for commercial uses at the Airport, while minimising sources of disturbance for local communities.

9.1.5 The Airport is located on a high plateau surrounded by agricultural countryside and the coast to the west. It has an important military heritage due to the airfield's association with key political events in the twentieth century (Second World War and the Cold War). This is still evident in many of the buildings and character of the Airport. There is also a high potential for buried archaeology in some areas. The Masterplan design considers landscape and historic character.

9.1.6 Although the habitats at the Airport are managed for aircraft and risk of bird strike, there are areas of wet woodland and grassland that are important for biodiversity. Many species of bats (some rare) use the Airport for roosting and feeding, as well as dormouse, otters, badgers and reptiles. The Masterplan design considers nature conservation as well as enhancement for biodiversity.

9.1.7 There are several small streams that rise within the Masterplan boundary. NQY is not at risk of flooding, although flood risk areas downstream will need to be considered. There is limited foul

drainage provision at the Airport, mainly on the northern side. Protection of water resources and provision of services is important.

9.1.8 Access to the Airport by public transport or cycling is very limited and the Masterplan, through the ASAS, considers how this could be improved. The Airport is also aiming to reduce its carbon footprint, through both reducing energy use and use of renewable sources such as the Kernow Solar Farm. Energy is also consumed through use of new building materials and re-use, recycling and generation of waste; these issues are also considered in the SA.

Figure 13 Views from the south of Masterplan area, looking towards DZ1, wooded valley and SH4 Hangar

Assessment

9.1.9 The current terminal is located on the north side of the Airport. The previous Masterplan (2008) proposed moving the terminal to the south side to Development Zone 3. The first stage of this Masterplan was to determine the preferred location for the terminal. A number of options were assessed in the north and south of the Airport. The northern options were likely to have a less negative impact on biodiversity, although a greater impact on existing communities. The southern options provided better transport links and opportunities for economic growth.

9.1.10 A number of other factors also influence the terminal location including passenger forecasts and the condition and capacity of the existing terminal building. The assessment determined that the existing terminal will remain in its current location. When passenger numbers reach 600,000 pa in the high growth scenario (currently predicted for 2030) a new terminal would be required and Development Zone 3 is safeguarded for this use in the Masterplan.

9.1.11 The proposed framework for development in each of the Airport's Development Zones was assessed and the following effects were predicted for the Masterplan overall:

SA Topic	Overview of Effects
Communities and Health	• In the medium-term, there is potential disturbance (noise, traffic, and lighting) to north-side communities as the terminal will remain in its current location. In the long-term the terminal may be located to the south. • Development of the Aerohub Business Park may introduce additional sources of minor disturbance to the isolated hamlets and residences to the south of the airport. • Development of the Business Park and eventually, Development Zone 3 provides the opportunity for linkages with communities at Newquay and Nansledan, in terms of provision of jobs and facilities such as retail and transport linkages.
Economy	• There are long-term regional benefits through continued passenger growth • There are positive effects on the local economy through the provision of long-term development space and opportunities in the Aerohub EZ.
Landscape and Historic Environment	• The Masterplan avoids indirect adverse effects on nearby designated sites. • Local landscape features are largely protected through design, included wooded valley in the south, and enhanced by proposed planting on the north-side. Sections of hedgerow will be lost for access in the Business Park. • The Masterplan avoids affecting many of the Airport's historic buildings and their settings, however, some historic buildings and associated character will be lost. • Although many areas where there is high potential of encountering archaeology have been avoided, some of these areas would be developed.
Biodiversity	• A number of areas of high ecological value have been retained by the Masterplan. • A couple of small areas of scrub/ grassland will be lost. • Areas within Development Zone 1 and the Northern Loop have been set aside to create new areas for biodiversity. Other enhancements are linked to existing areas of biodiversity.
Water	• A Surface Water Management Strategy has been produced to ensure there is no increased flood risk downstream from the Airport. • A new pumping station will be built at the Aerohub Business Park to pump sewage to a connection at St Columb Minor.
Traffic & Transport	• An ASAS has been prepared which sets out a number of actions and targets to improve transport. However, as the terminal will remain on the north side, there is limited opportunity to improve northern access via Ball Lane. • Improved access to the south side includes a bus loop, additional car parking and cycle parking.

Air Quality, Energy Use and Greenhouse Gas Emissions	• There are unlikely to be any effects on local air quality from the Masterplan. • In the long-term, there are several opportunities to improve energy efficiency in existing and proposed buildings. • The Solar Farm currently provides the Airport with renewable energy and there is the opportunity to incorporate use of biomass and anaerobic digestion into development.
Materials and Waste	• There are negative effects associated with new buildings due to raw materials used and waste generated during construction. • A number of buildings, structures and materials would be re-used, reducing waste and minimising use of raw materials.
Land Use and Quality	• The use of previously developed land in a number of zones, minimises the requirement for greenfield land-take. • There are some areas of proposed greenfield land take including the Aerohub Business Park and Development Zone 3. • No effects associated with sources of potential contamination were identified.
Cumulative Effects	• There are cumulative positive effects on the south side of the Airport, in relation to greater connectivity and economic growth with proposed new communities at Newquay. • There are potential negative cumulative effects from additional housing in the proposed Local Plan on landscape, flood risk, and disturbance on the north-side. However, this will depend on location and design of these sites.

9.2 Strategic Drainage & Surface Water

9.2.1 A Surface Water Management Plan (SWMP) (appendix 14.15) was produced to identify existing conditions, current and future proposals and identify how this site can be developed sustainably with regards to surface water runoff without increasing flood risk at or downstream of the Airport site, as well as maintaining or improving the quality of surface water discharges.

9.2.2 This site and the downstream receiving watercourses are not defined as 'critical drainage areas'. However, this largely green field site may be subject to considerable development over the coming years through the development of the site-wide Masterplan. With respect to new development, an SWMP study offers the opportunity to reduce existing surface water flood risk downstream or to create capacity in the drainage system through improvements in runoff from development sites.

9.2.3 The study was undertaken in four stages as recommended in current Defra guidance:

- Preparation
- Risk Assessment
- Options
- Implementation and Review

9.2.4 The Airport sits near the top of two river catchments: the Menalhyl flows to the north and the Porth Stream to the south. The northern tributary of the Porth Stream flows from east to west through the southern part of the site. It is formed from two small streams that rise within the site. A further tributary rises within the RAF St Mawgan site flowing into the tributary just downstream of the site boundary. It joins the southern tributary of the Porth Stream approximately 5km downstream, just before it drains into the sea at Porth Beach.

9.2.5 Several minor tributaries of Menalhyl rise from springs along the northern boundary of the site, within Carnanton Woods to the north east and near Little Acre to the north-west. The Mehalhyl discharges into the sea at Mawgan Porth approximately 1.5km downstream of the Airport. There is a further minor watercourse which rises on the western boundary of the site near Penvose Farm and discharges to the sea at Watergate Bay.

9.2.6 The Airport site is not located within a groundwater source protection zone; although the site is classified as a secondary aquifer, which is associated with the Meadfoot Beds underlying geology. These are permeable layers of rock capable of supporting water supplies at a local rather than strategic scale. These are generally aquifers formerly classified as a minor aquifer and is used for several local groundwater abstractions.

9.2.7 A number of risks were considered from sources of flooding and on water quality. Flood risks to the site are considered to be low due to the topography and location of the site at the top of a ridge/catchment and the surrounding system of watercourses. The highest perceived risks are considered to be:

- Unknown quantity and quality of runoff from existing systems, particularly the runway drainage network and associated infrastructure such as the fire-fighting training area
- Risk to the Porth, its tributary and the River Manalhyl from foul discharges from sewage treatment units and polluted surface water runoff
- Risk to local groundwater abstraction points
- Existing site contamination, e.g. fuel storage areas
- The residual risks following development, which in terms of quality and quantity, should be no greater than the existing conditions
- Construction phase risks, in terms of silt and fuel runoff
- On-going operation & maintenance liabilities in terms of controlling and maintaining quality and quantity of runoff from existing systems and proposed development plots

9.2.8 The report recommended that future storm water drainage features should adopt best practice 'Sustainable Drainage Systems Principles and Design Parameters'. Allowable runoff rates shall be taken as matching the existing green or brownfield condition plus an allowance for at least 10% betterment should be included along with appropriate climate change inclusions. The design allows for adequate space for these drainage features within each zone.

9.2.9 Water quality should be considered to reduce impact upon receiving waters and redevelopment should incorporate improvements in pollution control where required. Amenity and biodiversity features should be considered and whilst water features are not acceptable due to the hazard of attracting birds, green spaces can be promoted.

9.2.10 There will also be a need for a phased approach to foul drainage from DZ1 and DZ3, dependent upon the development timing for Business Park phases 1 and 3. In the short term this may be drained to the Business Park Phase 1 foul pump station. In the longer term another solution will be required and several options are presented in the report.

9.3 Biodiversity Action Plan

9.3.1 A Biodiversity Action Plan (BAP-appendix 14.18) has been produced. The BAP is required to present recommendations for actions to conserve and enhance biodiversity at NQY and to ensure compliance with the vision for the Airport, part of which is to provide a model of sustainable development principles.

9.3.2 The NQY BAP is intended as a working document. To be effective it will require updates and iterations in response to changes in legislation, policy, local priorities, site conditions and other drivers.

9.3.3 The BAP is comprised of the following elements:

- Introduction to biodiversity priorities in a national and local context
- The identification of biodiversity priorities and issues at NQY (the habitats/species that are priorities for maintenance, restoration and enhancement and any potentially conflicting issues), which will provide a baseline from which objectives and targets can be set
- The setting of specific objectives and targets for the biodiversity priorities identified at the Airport (in relation to national and local biodiversity targets)
- The actions required to achieve the objectives / targets (and the desired outcome)
- The mechanisms for delivery of the NQY BAP: participation and integration, training, internal and external reviews, updates, and management requirements

9.3.4 A number of ecological studies have been undertaken within the Masterplan boundary and immediate surrounding area. These were supplemented and reviewed for any evidence of notable habitats and species for which objectives and targets may be set within the NQY BAP.

9.3.5 A number of priority habitats for the Airport were identified including standing open water, running water boundary features, woodland and grassland. Priority species comprised bats, reptiles, dormice, birds, otter, invertebrates and amphibians.

9.4 Noise

9.4.1 Aircraft noise contours were generated for this Masterplan – see section 6.4. The dB LAeq metric (which measures continuous sound levels in decibels) is the traditional method of presenting average noise levels at Airports in the UK and is the method used in producing noise contours as outlined by the UK Government. UK Airports have historically used a 16-hour period (07:00 – 23:00) to produce a LAeq, 16-hour noise contour. This allows the average noise levels experienced by people living around the Airport to be estimated.

9.4.2 The noise contour plans are presented in the Sustainability Appraisal Report, appendix D, 'Contours for Summer 2030'. Summer 2030 which represents the worst case scenario, is included on the following page. (Refer to appendix 14.11)

The areas exposed to aviation noise above 57 dB LAeq 16 hour, which the UK Government considers to represent the point at which communities become significantly annoyed by aircraft noise.

9.4.3 There is one household currently exposed to aircraft noise from the Airport above 57 dB LAeq 16 hour. This is predicted to increase to 16 households in 2030 for summer operations. There are no households currently, or predicted to be, within the 63 dB or above noise contour, which is the level at which noise insulation should be considered.

9.4.4 It is not anticipated that the development of the Airport will result in any significant ground noise impacts. However, as part of a commitment to minimise noise from ground operations, the Airport would implement measures to control activities as part of the detailed design for sites.

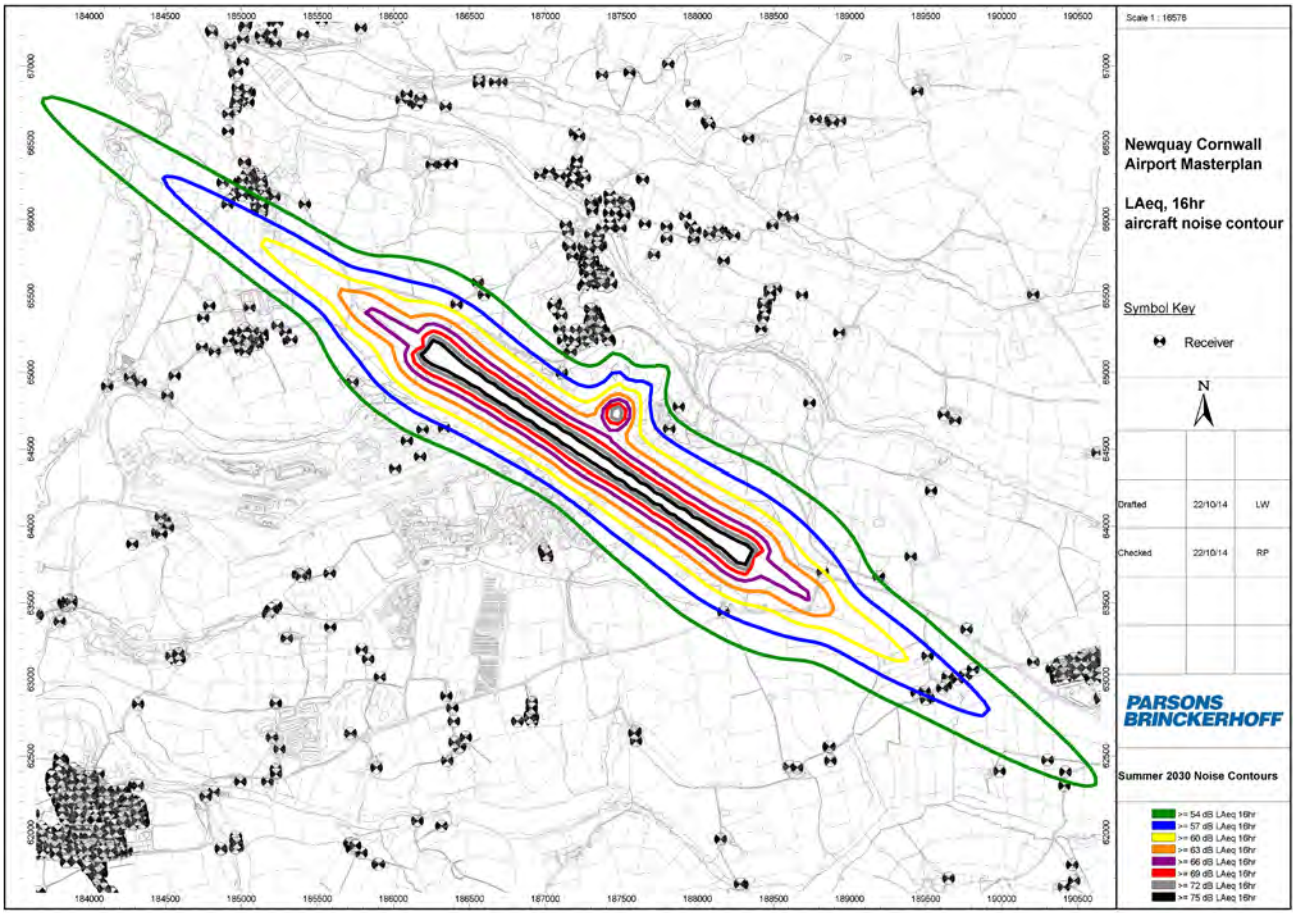

Figure 14 Airport Noise Contours for Summer 2030

9.4.5 As part of developing the Masterplan recommendations for a Noise Management Plan (NMP) have been set out. Recommendations have considered current best practice measures in use at other UK Airports and follow the International Civil Aviation Organisation's Balanced Approach to managing aviation noise. Recommendations are grouped into three areas mitigation, monitoring and communication.

9.5 Lighting

9.5.1 The overreaching lighting strategy looks to minimise long-term light pollution and light spillage into the local environment. Due to the Development Zones forming part of the Airport, Civil Aviation Authority restrictions apply.

9.5.2 The following codes provide guidance on the levels and extent of lighting:

- Hidden Zone - full cut off lighting max height 6m. Security floodlighting permitted
- Public square - feature lighting
- Visible Zone - full cut off lighting max height 6m
- Sensitive Zone - low level bollard lighting permitted only and no columns or wall mounted lamps
- Very Sensitive Zone - no lighting zone

9.5.3 Within bat-sensitive areas the requirement for lighting should always be considered. Where lighting is required, as may be necessary for aircraft and public safety, conditions should be imposed to ensure that impact of the lighting on the bats is kept to a minimum. The use of lighting-design computer software that calculates where light will fall should be used to identify the potential impact and to plan mitigation.

9.5.4 An assessment of each Development Zone has been undertaken and the results are recorded within appendix 14.27.

9.6 Airport Emissions

9.6.1 Aviation contributes to global greenhouse gas emissions. Since the start of 2012, emissions from international aviation have been included in the EU Emissions Trading System (EU ETS), requiring airlines to monitor, report and trade emissions. The EU ETS applies to all EU and non-EU airlines operating from European airports, as such there is a legal responsibility on the airlines using NQY to monitor report and reduce their carbon emissions in line with the requirements of the scheme.

9.6.2 The Operator has also recognised that the cruise emissions associated with air traffic movements to and from the Airport are notable emissions category within Cornwall's own carbon footprint, the Operator has been monitoring and reporting in flight emissions from the Airport since 2007. Emissions for the 2007 and 2008 data years have been included in the Cornwall and Isles of Scilly (C&IoS) Greenhouse Gas (GHG) Inventory (2009-2012 inventory update is due later this year). In 2008 aviation emissions were 15,990 tonnes CO^2 equivalent, based on 14,209 aviation movements. This was only 0.3% of the total GHG emissions recorded for Cornwall[36].

9.7 Local Air Quality Assessment

9.7.1 A local air quality assessment was undertaken to provide an overview of potential impacts of proposed changes to the Airport operations.

9.7.2 The principal sources of emissions to air from the Airport include the following:

- Emissions from aircraft (airborne and when on the ground)
- Emissions from road traffic accessing the Airport
- Emissions from airside vehicles and plant
- Emissions from any energy plant

9.7.3 Given its rural location, the generally good air quality, the assessment focused on the main source of emissions to local air quality which are emissions from road traffic[37] . Studies have shown that emissions from aviation related operations reduce rapidly beyond the immediate area around the runway[38]. The assessment looked at the impacts of the proposed changes to the access roads to the Airport in association with the SAS.

9.7.4 The main pollutants of concern from traffic are nitrogen dioxide (NO^2) and particulate matter (measured as PM10 and PM2.5). The air quality assessment will assess impacts from these pollutants on human receptors. A review of the area in the immediate vicinity of the Airport has shown that no statutory designated ecological sites are present and therefore the assessment has not considered impacts on ecological receptors.

36 'Greenhouse Gas Emissions for Cornwall and the Isles of Scilly', Camco, 2008
37 'Air Quality Progress Report', Cornwall Council, October 2013
38 'Aviation Policy Framework', Department for Transport, March 2013

9.7.5 It was found that impacts during construction of Development Zones are not likely to be significant given the short construction period and the rural location of the Airport. Good construction practices and a construction traffic plan will ensure that any potential impacts can be mitigated.

9.7.6 During operation of the existing Terminal, impacts are expected to be not significant considering that the location of the Terminal will remain unchanged in the medium term and proposed infrastructure, specifically the Newquay Strategic Route, is likely to improve access to Newquay by diverting traffic from the B3276, which currently experiences some congestion during the summer months.

9.7.7 The impacts from the operation of the Aerohub Business Park are not expected to be significant. According to the 2012 air quality assessment, the Aerohub Business Park is unlikely to adversely affect air quality on along the Newquay road network, which includes the A3059 main access road to the Terminal.

9.7.8 This assessment has focused on the current proposals of maintaining the Terminal at its current locations to the north of the Airport. However the Masterplan has also considered an area to the south for a new Terminal, when passenger numbers exceed 600,000. A new Terminal to the south of the Airport has the potential to impact local air quality in the vicinity of the A3059 and future receptors at the Aerohub Business Park.

9.7.9 Potential impacts associated with this option are likely to be mitigated with a new SAS that will address the increase in traffic along the A3059, which is likely remain the main access road to the Airport from Newquay. It is reasonable to assume, considering the current levels of NO^2 and PM10, that are well below the relevant objectives, that increases in traffic as a result of a new Terminal to the south, will not result in levels of NO^2 and PM10 exceeding the objectives. In addition a new Terminal to the south will also result in a drop in traffic numbers in the vicinity of the north Terminal and along the B3276.

9.7.10 It was concluded that the proposed Masterplan is unlikely to result in significant impacts on local air quality during construction and operation when appropriate mitigation and design solutions are implemented.

9.8 Energy Use at the Airport

9.8.1 NQY has a Carbon Management and Action Plan. The Airport is in the process of applying for the ACA Scheme.

9.8.2 This provides a mechanism to both benchmark and recognise the Airport Operator's efforts to measure, manage and reduce their carbon emissions across the four levels of award. The following progress has been made towards achieving Levels 1 and 2 of the award:

- Level 1 (Carbon mapping): Carbon footprints were produced for the 2009, 2010 and 2011 calendar years, alongside a Carbon Action Plan mapping out the actions required for the Airport to move towards Level
- Level 2 (Carbon Reduction): A Carbon Management Strategy has been produced and evidence of year on year reduction in emissions collated by the Operator. The Operator is working towards reducing their annual carbon footprint, including introducing renewables, improving onsite energy efficiency/management, and staff training to ensure the implementation of policies

9.8.3 In May 2015 the Operator achieved its Level 2 Carbon Accreditation from the Airports Council International the recognised industry Body. The Operator considers the importance of reducing its carbon footprint which it has successfully achieved over the last few years.

In terms of ACA compliance and evidence requirements, only the Operator's corporate carbon target and carbon footprint is used at present. CAL has not yet committed to progress to a Level 3 as it needs to understand the impacts of that commitment i.e. financial and timescale. The Carbon Footprint graph shows carbon emissions from the activities and facilities under the Operators influence:

- Direct 'control', e.g. onsite fuel consumption (Scope 1)
- Indirect 'influence', e.g. onsite electricity consumption (Scope 2)
- Indirect 'guidance', e.g. business travel and electricity transmission and distribution loses (Scope 3)[39]

9.8.4 The majority of emissions (approx. 72% in 2012) are derived from the Operator's onsite electricity consumption with the remainder being associated with fuel consumed either for heating, transportation or by generators.

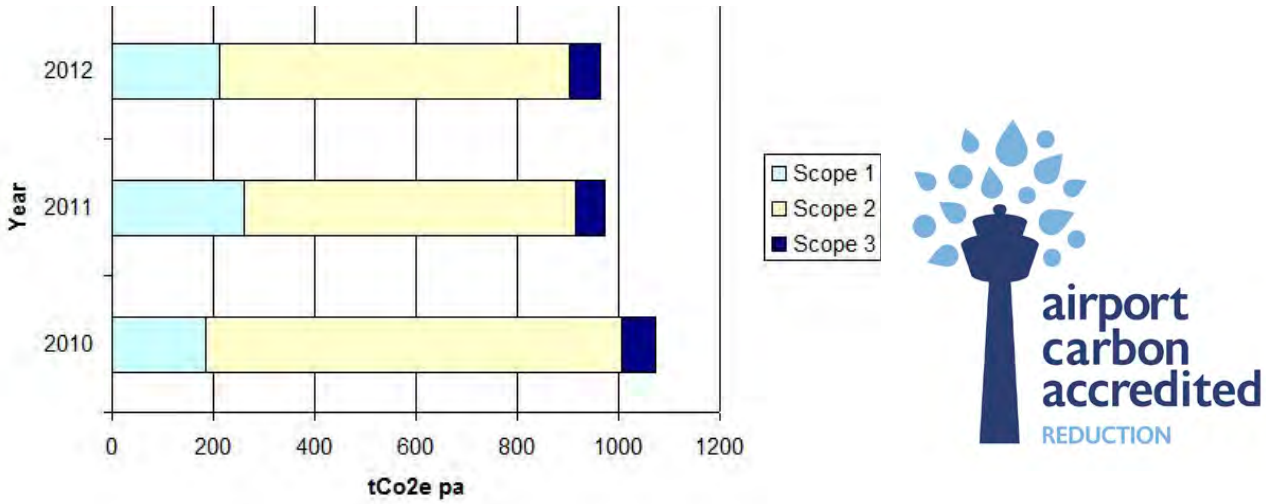

Figure 15 CAL Carbon footprint 2010–2012

9.9 Energy Supply

9.9.1 The Kernow Solar Park, owned by CC, is a 5MW Solar Photovoltaic farm in the southwest of the Masterplan area. The yield calculations give an overall yield factor of 983 (kWh/kWp). The CO2 benefit of this production has been estimated at 2,700 tonnes per annum. The Solar Park was completed in 2013 and provides solar energy to the Airport.

9.9.2 A number of options[40] for biomass and anaerobic digestion have been investigated. Based on a number of criteria, a biomass boiler solution was preferred for an Aircraft Finishing Workspace that was proposed in Development Zone 1. A number of options are still being investigated relating to containerised anaerobic digestion and other small-scale renewables.

39 'Newquay Cornwall Airport Carbon Management Report and Action Plan 2012-2015 (DRAFT)', CAL, 2013
40 'Newquay Cornwall Airport Biomass Options Study', ARUP, Sept 2013


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10.0
Mitigation and Monitoring

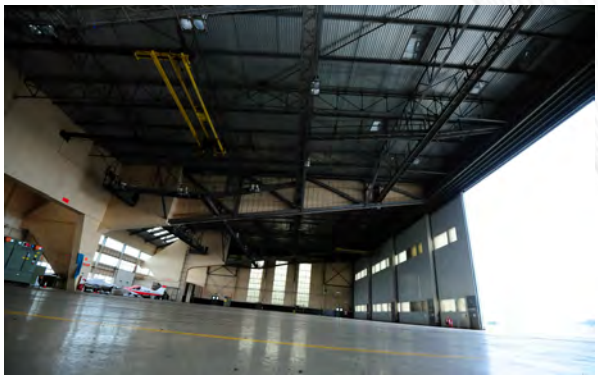
10.1 Mitigation and Monitoring

10.1.1 Contained within the Environmental Report[41] is the full detail of recommended mitigation and monitoring framework strategies. Mitigation measures have been proposed to prevent, reduce or offset any significant adverse effects on the environment of implementing the Masterplan. Enhancement measures have also been proposed to maximise the benefits of predicted positive effects.

10.1.2 Key mitigation and enhancement measures comprise:

- Use of the lighting strategy to avoid introducing new sources of light intrusion to local communities, landscapes and to avoid impact on bats and other nocturnal species
- Long term safeguarding of Development Zone 3 for a terminal to move any potential disturbance away from periphery communities and create a hub on the south side with better surface access links to communities at Newquay
- Planting along the perimeter of the Northern Loop to provide habitat connectivity and additional buffer between the Airport and landscape to the north, in addition to local communities
- Maintain the wooded valley to the south of the Airport, including a buffer zone to maintain landscape features, protect wildlife and the Porth Stream tributary
- Protection of historic built environment through use of mitigation set out in the HEA section of the SA (refer to appendix 14.12), including retention and adaptive re-use of historic buildings, use of historic building recording, consideration of setting and building association in detailed design
- With reference to the loss of buildings and structures of heritage significance, the Masterplan will ensure that any loss will be justified in accordance with the provisions of the National Planning Policy Framework
- Avoid the prehistoric settlement within Business Park West where possible and use a phased approach to archaeological evaluation in other areas
- Manage woodland, hedgerows, grassland and other habitats as set out in the BAP to strengthen and improve biodiversity and landscape

41 'Sustainability Appraisal, Environmental Report', Parsons Brinckerhoff, 2015, Table 5.1



- Areas for ecological enhancement have been identified within Development Zones
- Use of visual assessment and design for development where required due to location or scale of development, for example a future terminal building on high ground in DZ3
- Detailed drainage design should ensure pollution prevention to surface and groundwater and existing run-off rates, with 10% betterment and appropriate climate change allowance – any new development to be accompanied by improved pollution control
- Use of actions and targets set out in the ASAS to improve accessibility and minimise vehicular emissions to air
- Consideration of rainwater harvesting and grey water collection from buildings for all zones, in addition to improving energy efficiency in new build and refurbishment (Terminal, HAS, DZ1, DZ2, DZ3, Business Park)
- Investigate the use of biomass and anaerobic digestion facilities (and/or other low carbon heating solutions) for development in a number of the zones
- Maximise use of existing structures – re-use/ recycling of hardstanding and other materials on-site; and allow space for future waste management in detailed design to minimise effects on natural resources
- Use of construction best practice including updating protected species surveys and a Construction Environmental Management Plan to minimise environmental effects

10.1.3 In addition, indicators have been proposed to monitor potential negative and positive effects, where monitoring helps to ensure that any problems which arise during construction and operation of development schemes, whether or not they are foreseen, are addressed.


Nationwide Platforms
SKYJACK

11.0

Future Growth Framework

11.1 Development Opportunities

11.1.1 There are a number of development opportunities that have been identified as part of the Masterplan and these are detailed further in the text below. In order for them to be enabled it is envisaged that public sector support from European, national, regional and local sources will be pursued. Suggested projects included:

- Infrastructure inside and outside the Airport boundary
- Operational infrastructure
- Hangar and offices

Terminal Zone

11.1.2 The development options which consider the existing terminal facility are dependent upon the decision to retain, refurbish, expand, or to relocate the terminal to the south of the Airport. Evidence of passenger growth, passenger forecasts and the maximisation of existing terminal capacity will determine whether a new build terminal can be justified or afforded. Based on the passenger forecast work undertaken by RDC Aviation[42] it has been identified that passenger numbers are unlikely to trigger a new build terminal by 2030.

11.1.3 However, it is understood that there will continue to be aviation related constraints to the northern areas located within the LDO, such as height restrictions on development, distance of development from the runway, noise and light pollution effecting Carloggass and St Mawgan. These will dictate what activities may or may not take place.

11.1.4 However, in the event of relocating the terminal to the south it would be more appropriate and desirable to have a co-ordinated, well-integrated development hub in a single location that comprises some or possibly all of the above elements. This would therefore reduce pressure on the level of physical demand for land to the north, its future function/use and ultimately any value that may be generated from investment there.

Development Zones 1, 2 and 3

11.1.5 These Zones on the operational Airport represent further opportunity for growth and due to their location will predominantly have an aviation/aerospace focus. Combined, these zones offer a significant area (58.5 hectares, 144.5 acres) of development land for new business development through new hangar space, offices, ancillary accommodation and workspace.

11.1.6 There are already a number of successful businesses operating effectively from some of the existing properties (though many of these buildings are outdated and suffering from a lack of modern services and infrastructure), particularly within Development Zone 1.

Hardened Aircraft Shelters (HAS) Zone

11.1.7 There are already a number of successful businesses operating effectively from the HAS area. They are serviced and accessed within the HAS units and further enhancement of this area is seen as providing a prominent location for business.

Business Park Phase 1

11.1.8 The LDO for this zone was approved in 2013 and was based on the creation of a Business Park to the south of the runway. Accessed from the SAR the Business Park will provide fully serviced and accessed development plots.

42 Newquay Cornwall Airport Market Assessment and Forecasts, RDC Aviation, May 2013

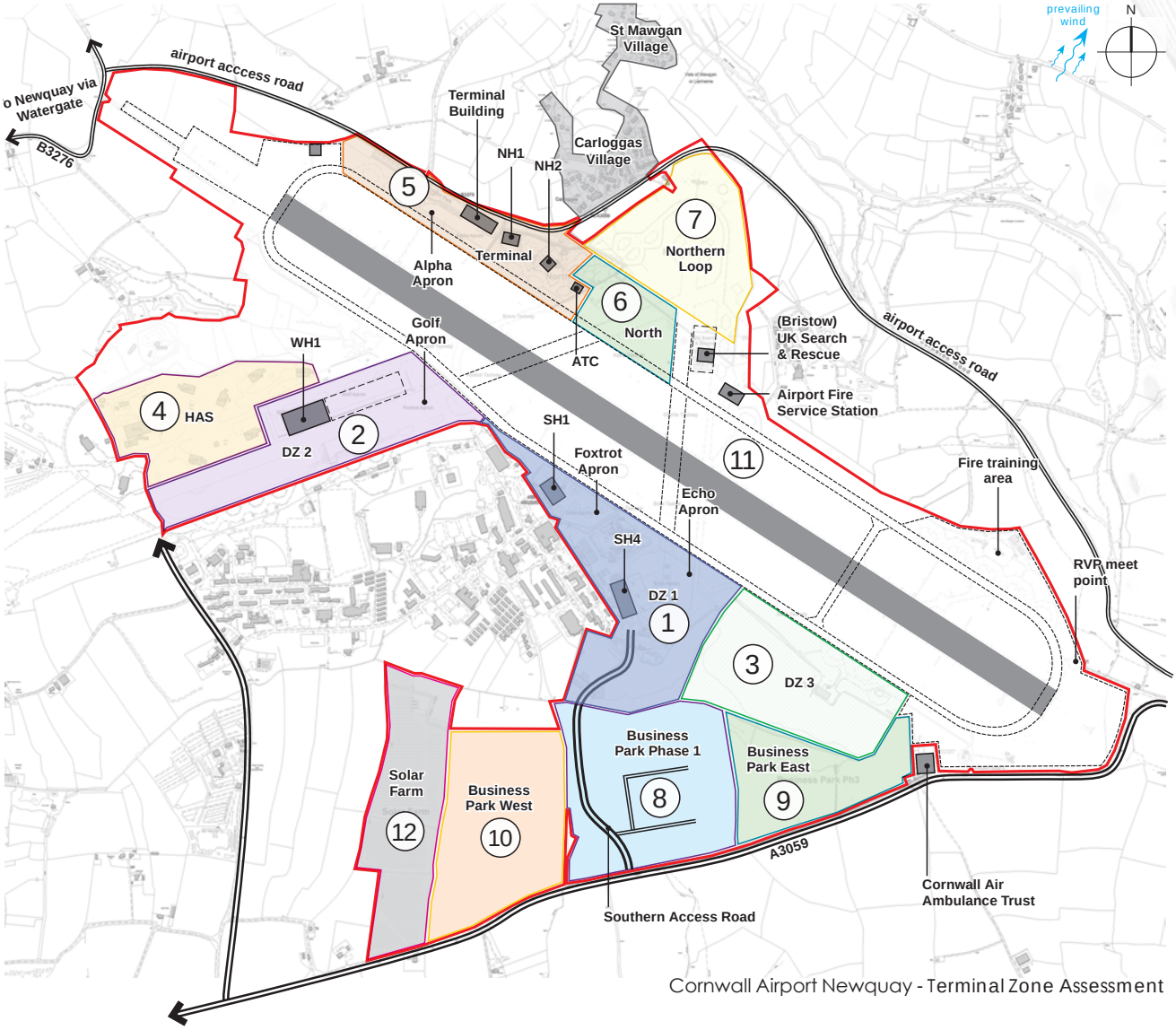


Figure 16 Development Zones Location Plan

- 1 Development Zone 1
- 2 Development Zone 2
- 3 Development Zone 3
- 4 HAS
- 5 Terminal
- 6 North
- 7 Northern Loop
- 8 Business Park Phase 1
- 9 Business Park East
- 10 Business Park West
- 11 Runway, Taxiway Apron Operational Zone
- 12 Solar Farm
- Masterplan Boundary

Business Park West

11.1.9 Located between the SAR and eastern boundary of the Solar Park, this area with direct access from the Road, will provide fully serviced and accessed development plots and is seen as providing a prominent location for business. Delivery of this site could come forward after completion of Business Park Phase 1.

Business Park East

11.1.10 Identified within this Masterplan as a future expansion zone once Phase 1 is fully occupied. This area is seen as coming forward to support Aerohub growth that exceeds current forecast levels and is covered by LDO2.

North Zone

11.1.11 This area is identified within the LDO as a Development Zone, adjacent to the Terminal location.

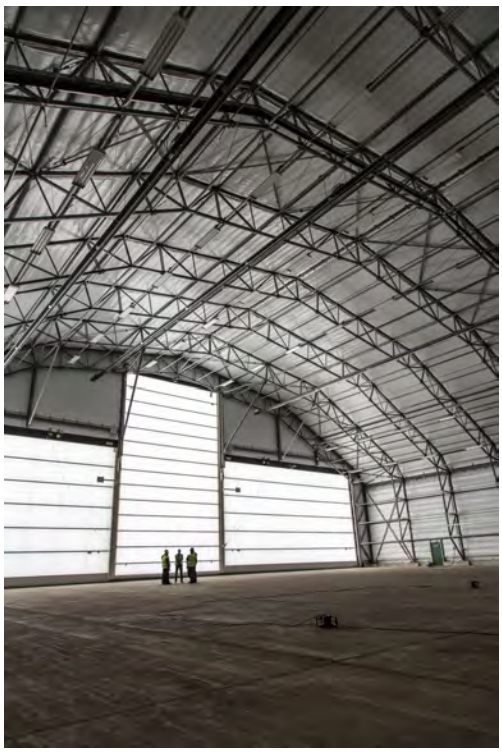
Northern Loop

11.1.12 The area is identified within the LDO as a Development Zone but has been referenced within the Development Zone plans as an area set aside for future use. What this implies is that all effort to support investment and development should be focused on LDO Development Zones identified within the south. However, should a unique proposition arise, that could not be located in the southern cluster environment, it could be considered.

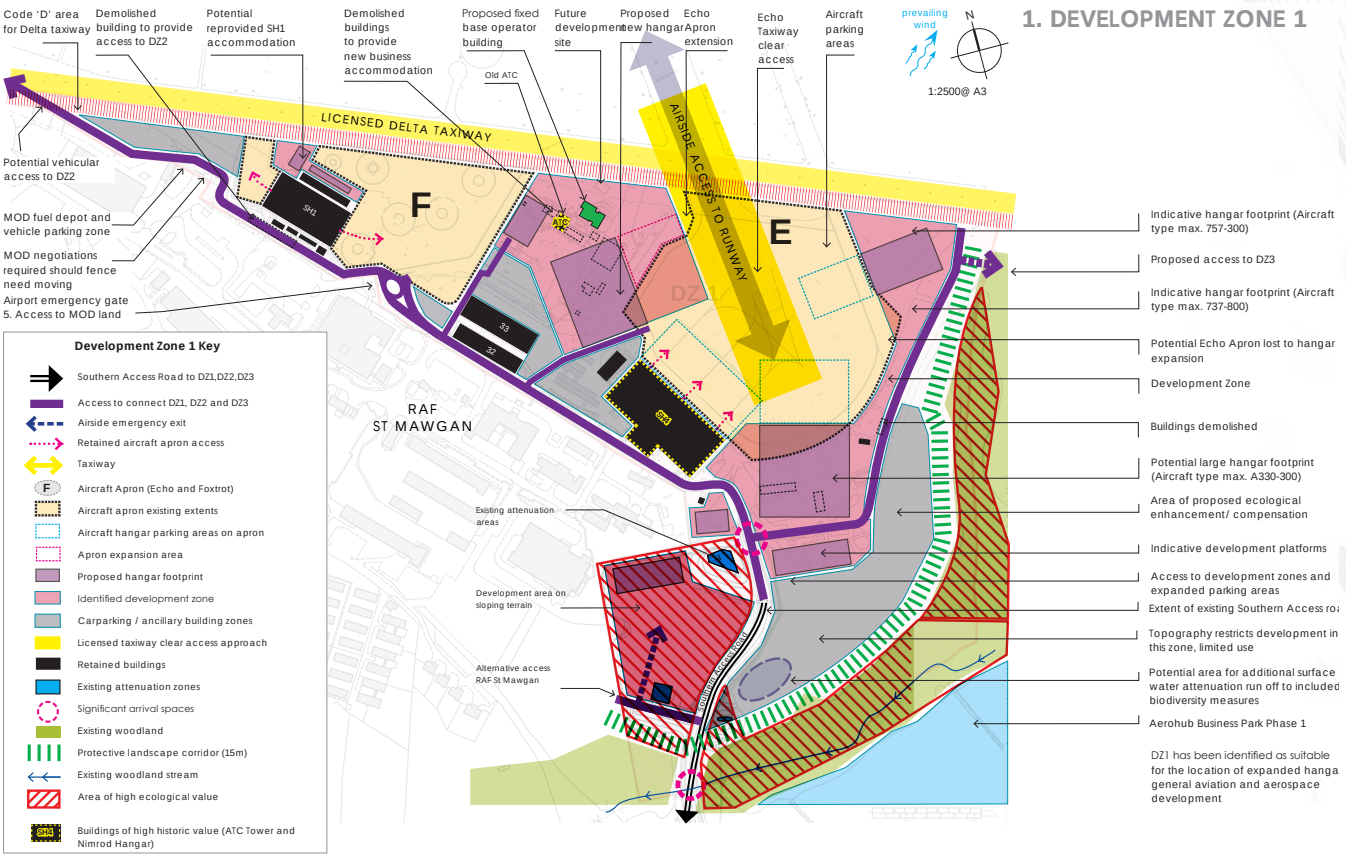
11.1.13 While concepts to promote growth and investment are encouraged, further opportunities that meet with this Masterplan, and which provide investment that secures the Airport's future, will be supported.

11.1.14 The following Development Zone plans illustrate the opportunities presented on the Airport. They take account of all the research and data as identified in section 1.2 and the technical studies undertaken during the development as part of this Masterplan. They provide frameworks which businesses can use to identify investment opportunities at the Airport. Enlarged versions of these plans are included with the appendices 14.1-14.8.

11.1.15 The design team have carried out the role of BIM Managers and lead coordinators of the BIM model. As a fully integrated design team, they have worked in a Building Information Modelling (BIM). Although this is a masterplan exercise, they have been able to utilise BIM at a high level. At this early stage in the project the use of BIM is limited but has helped with co-ordination and visualisation. At future stages the use of BIM will give collective coordinated benefit, such as material take-offs, logistics, safety, optioneering, services infrastructure, clash prevention and wide ranging outputs that could also include Facilities Management (FM) and completed building awareness. The strategy of application associated with BIM is well thought through from the outset, as opposed to being 'bolted on' to the design process later. At later stages it will be possible to export coordinated BIMx 3D models to present to the whole project team to show design development and progress. Using BIM is a great way to ensure the standard of work produced is monitored. The design team have been responsible for the full coordination utilising their unique expertise at the forefront of BIM technology.



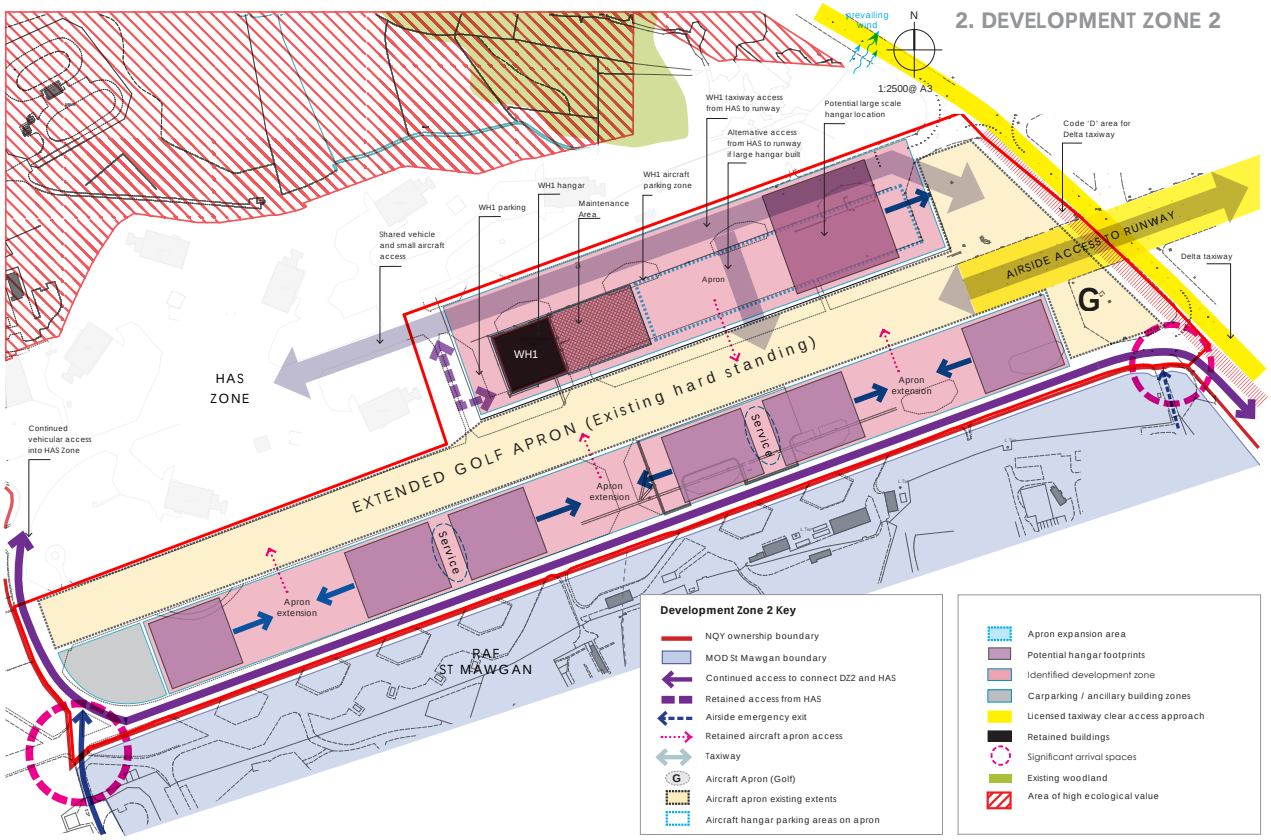
11.2 Development Zone Framework Plans and Conditions Table



Development Zone	Description	Opportunities
Development Zone 1 (DZ1)		
Physical Site	Located on the southern side of the runway, the zone sits between the Delta taxiway and RAF St Mawgan. Its high point sits in the north-east corner adjacent to Delta taxiway, which runs the length of the zone's northern edge, falling approximately 2m down to the west towards Foxtrot apron. From Delta taxiway the site falls approximately 4m to the south side of the old Nimrod Hangar, SH4 (Southern Hangar). From there it falls a further 8m into the valley towards where the southern access road crosses the valley stream, and presents a relatively large development site at the top of the SAR. The existing wooded valley and stream flowing from the east to west runs along the south eastern boundary, which is steeply sloping. Multiple buildings exist within the zone, most in use and some derelict/vacant. A large area of the site is covered by tarmac and concrete, forming the Foxtrot and Echo aprons and hard standing around the hangars.	DZ1 has been identified as suitable for the location of expanded hangar, general aviation and aeropsace development.

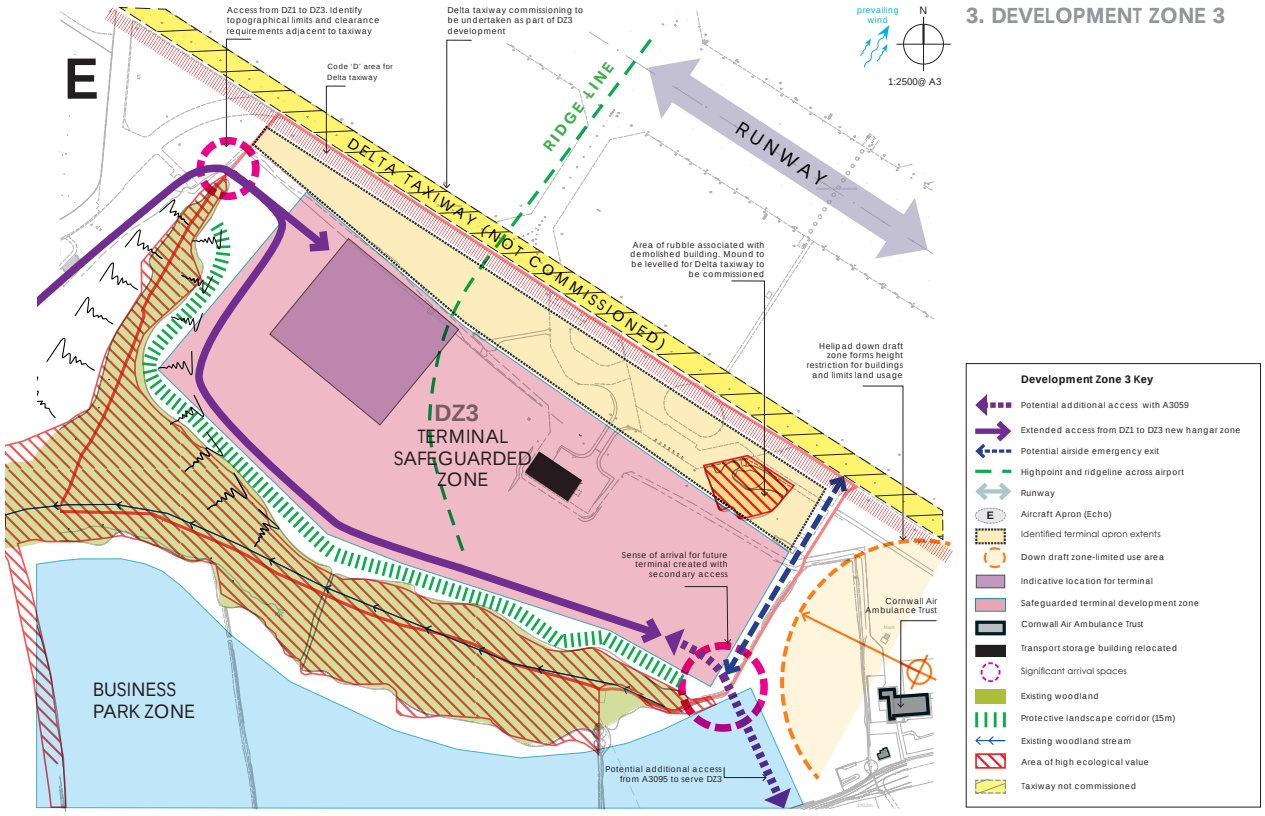
Infrastructure:		
Access	Access is gained from the south along the newly constructed SAR. This currently leads to the Echo Apron at the front of SH4, and is further marked out along the southern boundary to serve other hangar and aviation facilities within DZ1, where it terminates. Within DZ1 an airside secure fence restricts both vehicle and pedestrian movement. Beyond this, air-traffic control authorisation is required.	The site is accessed directly from the SAR and is therefore immediately connected to the wider highway network from the A3095. Direct access is also available to the Aerohub Business Park from the SAR. Within DZ1, connections are proposed to access Development Zone 2 and on to the HAS zones, providing the necessary links to bring these sites into commercial use.
Services	The site has a limited range of services that connect to the existing buildings and provide electricity, telecoms, water and foul. A new sub-station is located to the western edge of boundary and is connected to the solar farm. There are multiple decommissioned historic service voids and chambers that exist within this zone that require further investigation.	Significant improvements to service connections to power new facilities will be required at considerable cost, and this again should be considered when advancing development design.
Drainage	Currently foul water is collected into a local foul system. Historically this may have been discharged west towards the Kelda Water/ MoD treatment works adjacent to the Porth Tributary stream some 1.5km south west, however since the transfer of assets to CC and severing of services, foul water is understood to discharge via a small package treatment plant which discharges to the Porth Tributary stream. Surface water is conveyed to the stream via overland or existing piped systems. This is further explained in the supporting SWMP (appendix 14.15)	Surface water could be separated and diverted to the stream via SUDS features. Foul water drainage may be collected to the south of the DZ1 site and link in with the proposed Business Park foul infrastructure, or connect to an upgraded Keldra Water system. The full strategy is identified within the SWMP (Appendix 14.15)
Runway / Aviation	DZ1 is ideally connected with direct access to Echo apron and taxiway. Most aircraft types can use the Echo licenced taxiway and the recently upgraded Echo apron. Access to the Foxtrot apron from the runway is only available to rotary wing aircraft and operations from SH1.	DZ1 is well positioned to benefit from the existing commissioned and licensed Echo Taxiway with access to the runway.

Property / Building Assets	The buildings within DZ1 include: SH1, SH4, 541, buildings 32, 33, the decommissioned ATC tower and its ancillary buildings (all redundant historic uses), a new sub-station and various new temporary office cabin units. There are also masts, historic bunkers and a new attenuation pond located in this zone.	The majority of buildings located within DZ1 are mostly post war. The former Nimrod Hangar (SH4) is the largest and forms a significant feature within the setting of DZ1. Most of the ancillary buildings have been decommissioned and should not be considered a constraint to the provision of new buildings. While SH4 is registered as of 'significant historic interest' it does require modernisation. Within this location the decommissioned ATC (original core only) tower provides another building with historic value, but its conversion or retention is subject to further analysis and overall site design.
Environmental:		
Landscape	The landscape in context of aviation use is limited to small areas of mown grass existing around the aprons and the old ATC tower. To the east and south the grass areas extend into the steeply sloping valley and merge with the wet woodland.	Within the main operational area of DZ1, there is no landscape that needs to be retained and as such all future provision should be designed to suit the purpose of its use as a setting for future development. The sloping area of land to the south either side of the Porth Tributary forms part of the landscape valley and should be retained and enhanced to maintain its character and habitat.
Ecological	An area of wet woodland along the existing valley floor within southern area has been identified as an area of High Ecological Importance. Land on the west of the SAR is defined as scrub grassland. This again is an area of High Ecological Importance and is identified as having potential to support wildlife.	These areas are required to be protected and enhanced as described by the ecological management plan.
Historic	There are many historic assets within DZ1 relating to the historic RAF operational activities of the site. Of noted interest are the SH4 (Nimrod Hangar) and ATC tower. Reference should be made to appendix 14.12: Sustainability Appraisal HEA 'Newquay Cornwall Airport: Historic Environmental Assessment and Characterisation', CC, 2011	These buildings should be considered on their individual merit as part of any new proposals. Their retention or removal will have to be considered as part of discussions with the Cornwall Council Historic Environment Services.



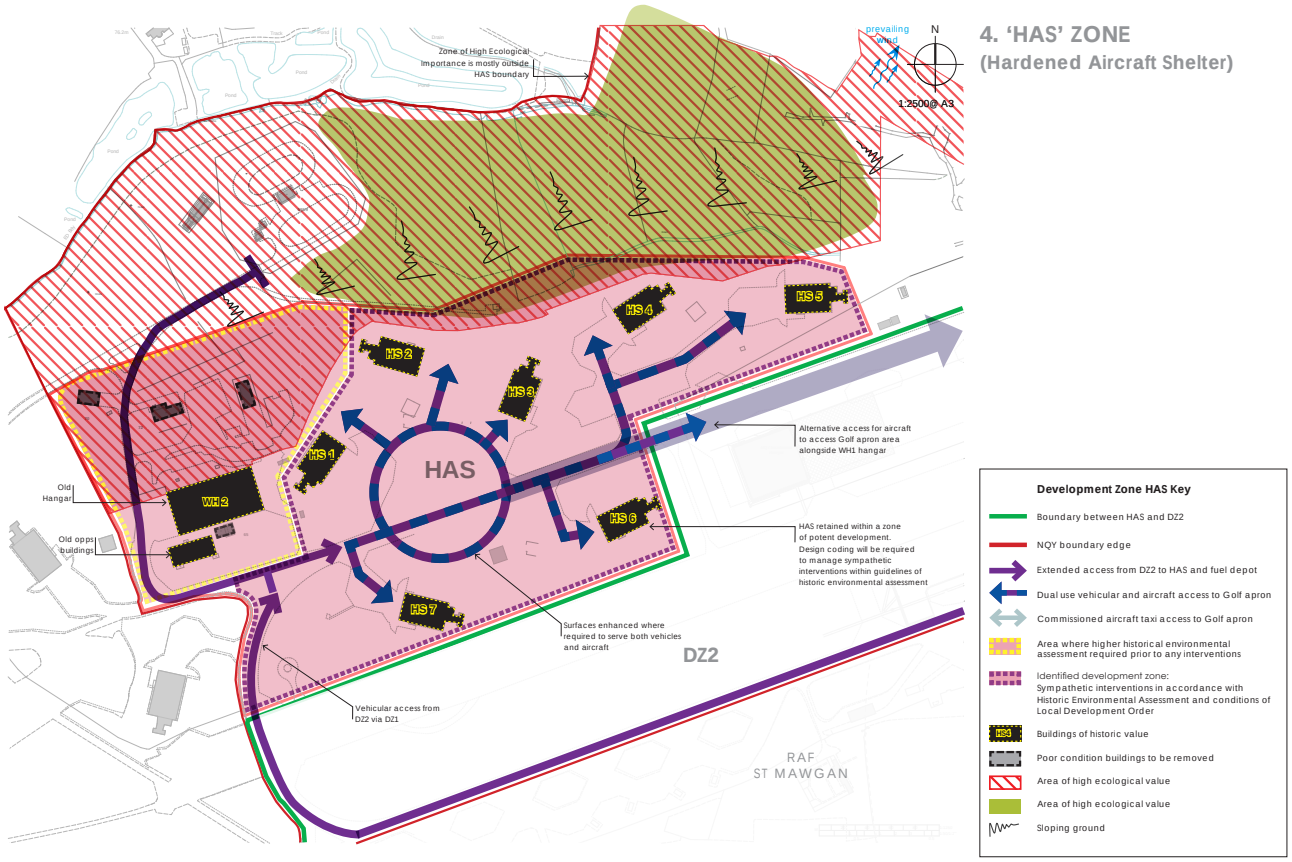
Development Zone	Description	Opportunities
Development Zone 2 (DZ2)		
Physical Site	Located on the southern and west side of the runway, this site is sandwiched between the HAS ZoneE (HAS) to the west and RAF St Mawgan to the east. The high point is located in the north-east corner where it adjoins DZ1 and falls gently over 3m towards the west edge. DZ2 is mostly formed of decommissioned cross runway and taxiway routes. The site is the most level area within the Airport boundary. The only building located within the zone is the newWH1 (West Hangar), situated to the west of Golf apron.	DZ2 has been identified as a suitable location for additional aviation-based hangar development, where direct access to Golf apron and the runway and larger areas of undeveloped site are available.
Infrastructure:		
Access	Access is currently available from the road network, and permissible through air traffic control clearance. The site is landside. An access to RAF St Mawgan connects the south-west corner to the boundary The road leads south along the RAF base boundary past Treloy Touring caravan park and connects to the A3059. This route is approximately 0.5km long.	Additional vehicular access can also be provided with connection via DZ1. A proposed connection along the MoD fence line would impact on various ancillary structures currently in use in DZ1. A more detailed vehicular strategy will be required in coordination with air-traffic control management and any existing tenants.

Services	Services are limited within DZ2 with new electric and foul drainage needed to be provided to serve the WH1.	Limited service connections can be provided to DZ2 with heavier demand requiring additional and potentially updated electrical and foul networks being installed.
Drainage	With the site levels varying by only 3m across its area, surface drainage largely falls to the north-west and drains naturally into the adjacent valley. There is limited information on existing drainage in this area.	Capacity for surface water drainage can be managed within DZ2 utilising existing runoff areas alongside new enhanced solutions. Foul drainage may be collected to the south of the DZ1 site and link in with the Aerohub Business Park pump station in the short/medium term, or connect to an upgraded Kelda Water system. The strategies proposed are identified within the Surface Water Management Plan (appendix 14.15) and the Foul Drainage strategy (appendix 14.17).
Runway / Aviation	Golf apron is adjacent to and accessed from Delta taxiway, providing direct links to the runway. The apron provides a large aircraft standing area that extends further west along the decommissioned RAF cross-runway. This is aligned south-west to north-east. The area of decommissioned runway connects further south with the RAF St Mawgan boundary to additional historic military facilities, to the west into the HAS, and with Golf apron in the north.	Connections to the runway can be easily made, which make this site suitable for further aviation development. Minor taxiway surface improvements may be required in the long term. A licenced extension to Golf apron (extending further south-west into DZ2) increases access to the runway.
Property / Building Assets	A new hangar building WH1 exists to the north of Golf apron. No other buildings exist.	The site provides a large flexible area for the development of aviation-based buildings and supporting infrastructure.
Environmental:		
Landscape	There are no landscape areas within DZ2.	Within the main operational area of DZ2, there is no landscape that needs to be retained and as such all future provision should be designed to suit the purpose of its use as a setting for future development.
Ecological	There are no areas of important ecological interest within DZ2. See SA Report for further details.	N/A
Historic	There are no areas of important historical interest within DZ2.	N/A



Development Zone	Description	Opportunities
Development Zone 3 (DZ3)		
Physical Site	Located on the south-eastern side of the runway, this zone is between the unlicenced Delta taxiway on its northern edge and wet woodland valley to the south, with the Aerohub Business Park located beyond this. Cornwall Air Ambulance Trust is located adjacent to the site on its most eastern corner. Its high point is located in the centre of the site, which forms part of the ridge running north–south across the runway. DZ3 is mostly formed of an open maintained grass area. The southern edge of the site is steeply sloping and forms the beginnings of the valley and its stream flowing east to west at its lowest point. A single transport storage building is located in the centre of the site. This is connected to the unlicenced Delta taxiway.	DZ3 has been identified as a suitable location for additional hangar, general aviation and future terminal services, where direct access to Delta taxiway and the runway, and larger areas of undeveloped site are available.

Infrastructure:		
Access	There is no vehicular access to DZ3. Airside access to DZ3 is possible through permitted air-traffic control and is gained physically from either DZ1 or via permitted airside entry points.	Access to DZ3 can be made via an extension of the SAR, routed along the western edge of DZ1, or potentially provided as an additional connection from the A3059 at a junction located near to the Cornwall Air Ambulance Trust. These connections, though new, would bring a large area of available land into use.
Services	There are no main services to the site. Limited electrical supply connects to the transport storage building.	New service connections will need to be made to this development zone.
Drainage	There is no drainage on the site. Water runoff is managed through existing levels towards the wooded valley.	A site-specific detailed drainage strategy will be required to support any proposals for development
Runway / Aviation	The site has a direct connection to the unlicensed Delta taxiway. This eastern section of the Delta taxiway does not currently comply with CAA regulations due to the change in levels along its north-west – south-east alignment.	While a direct connection is provided to Delta taxiway, commissioning work will require grading of levels to ensure required standards are met.
Property / Building Assets	The transport storage building is located on the site. This is an industrial building of no heritage value.	N/A
Environmental:		
Landscape	The landscape is characterised as managed grass areas associated with an airfield. The southern extents formed by the wet woodland provide more ecological interest and character.	Landscape character can be improved to complement development suitable to the requirements of aviation related uses.
Ecological	There are two areas of important ecological interest identified within DZ3. These are limited to all of the wet woodland area within the valley floor and a small rubble mound close to the taxiway. See SA Report (appendix 14.11).	The existing valley, wet woodland and grassland areas offer opportunity to enhance habitat and create a distinctive landscape environment to complement development potential.
Historic	There are no areas of important historical interest within DZ3.	N/A

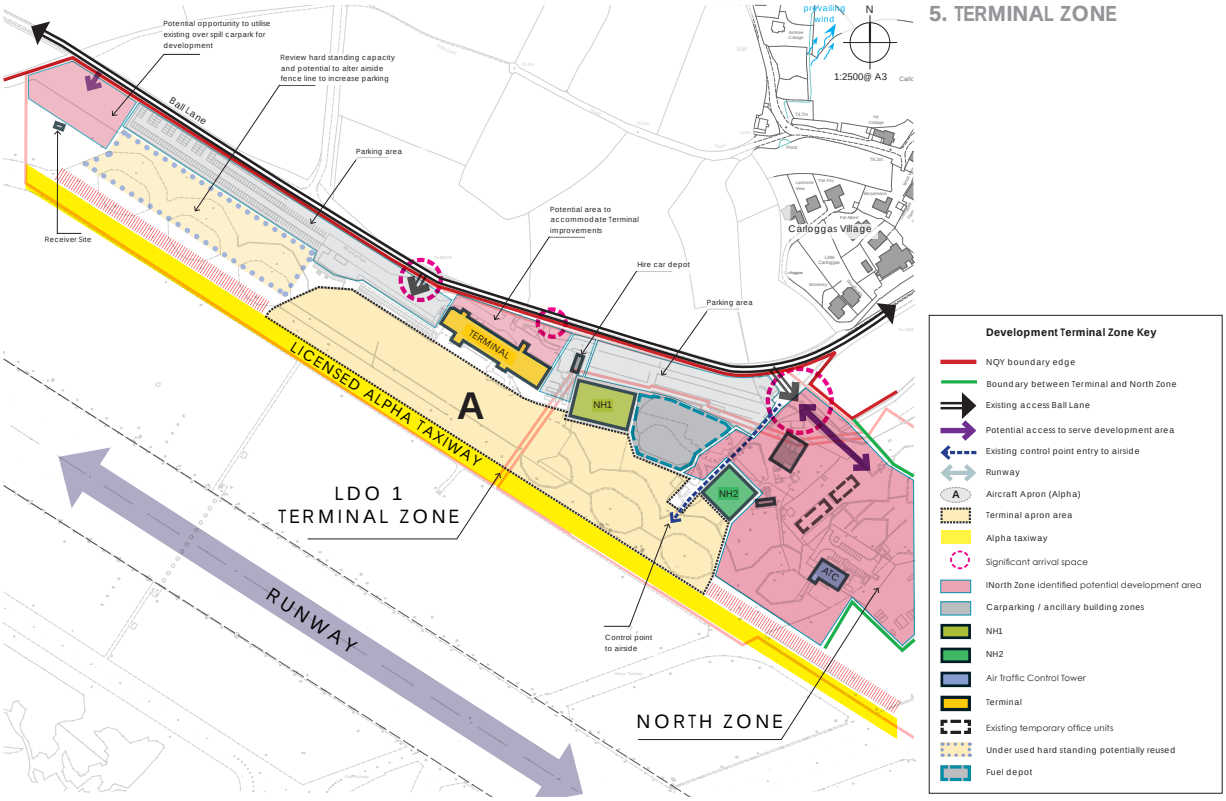


Development Zone	Description	Opportunities
HAS (Hardened Aircraft Shelter)		
Physical Site	The site is located to the western edge of the Masterplan boundary. It is bordered by scrub woodland to the west, an area of ecological value, which forms part of a low valley. To the east, the site is bounded by Development Zone 2 and Golf apron. The site forms an area of historic importance where seven hardened aircraft shelters are located. These are used for modern commercial uses, albeit providing basic facilities. Additionally there is a redundant hangar, a communication building and various garages associated with historic military activities. To the north lies Golf apron and the Delta taxiway providing access to the runway.To the south the Masterplan boundary abuts further RAF St Mawgan land.	The HASs unique structures provide a reference to the past uses of RAF St Mawgan, and could form part of a dynamic aviation business environment that utilises and enhances the character of this area.

Infrastructure:		
Access	Access to the site is limited via passage through DZ2. Within this zone, vehicular and aircraft access to the HAS is shared. The existing hard standing that serves the HAS buildings remains and provides direct access to each hangar. A further access road runs to the south and west of the zone providing access to the disused fuel depot. This also provides access to various historical military operation buildings.	Additional vehicular access can only be provided with the connection via DZ2 and subsequently DZ1. While this connection can be made, it does impact on the location of various ancillary buildings currently in use within DZ1. A more detailed vehicular strategy will be required in coordination with air-traffic control management and any existing tenants.
Services	Limited utilities service the hangars. Foul services are connected to the local network flowing south-west.	A new network will be required.
Drainage	Surface water drainage largely falls to the north-west and drains naturally into the adjacent valley.	Capacity for surface-water drainage can be managed within HAS, utilising existing runoff areas alongside new enhanced solutions. Foul-water drainage may be collected to the south of the DZ1 site and link in with the Aerohub pump station or connect to an upgraded Kelda Water system. The full strategy is identified within the SWMP report.
Runway / Aviation	The existing hard standing areas serving the HAS connect to Golf apron and proposed extended Golf apron area. The access is currently unlicensed and would require to be licensed to provide runway access via Golf apron and Delta taxiway.	New enhanced licensed connections with Golf and Delta would enable the HAS area to connect active aviation functions to the HAS buildings.
Property / Building Assets	The HAS currently are all let out and provide income to the irport. Their condition is adequate for storage. The old operations buildings and hangar are in a poor state of repair and as such have been identified as potentially suitable to remove, subject to historic assessments which have to be carried out in accordance with the HEA.	Using the HEA as guidance, it is possible that potential additional buildings could be sympathetically added within immediate proximity of the HAS to provide extended business space facilities.

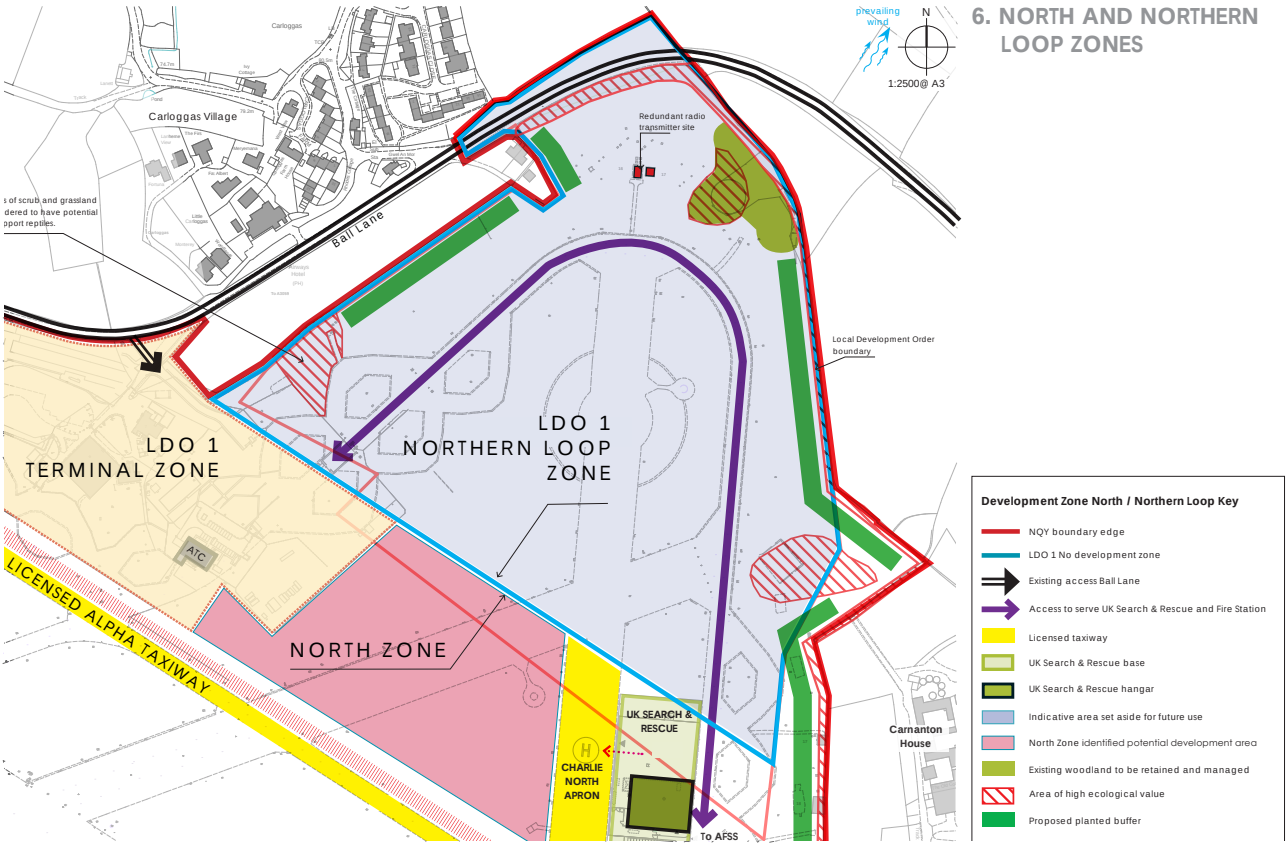
Environmental:		
Landscape	The site is bounded to the north by the scrub woodland area which is formed at the head of a low depression and valley. Areas around the HAS are defined by hard standing and maintained grass areas. These areas are considered important in the setting of the HAS	Coordination of environmental landscape measures and management must be considered as part of any development proposals. A detailed landscape design sensitive to the historical references of open grassed areas would need to support any proposals.
Ecological	The area of high ecological value to the north is identified as 'Raised Sphagnum' bog either side of which are areas of bracken and scrub.	The important ecological areas within this zone can be enhanced and protected as part of the proposals.
Historic	The HAS along with a series of old operational buildings and communications hangar (WH2) have been identified as 'Buildings of Historic Interest'. Their surrounds and context are also noted as of historic interest. Reference should be made to the Sustainability Appraisal ¬ HEA 'Newquay Cornwall Airport: Historic Environmental Assessment and Characterisation', CC, 2011 (appendix 14.12).	The historical assessment identified a need to maintain reference and setting for the HAS and associated building. Any proposals will look to approach design opportunities sensitively.

5. TERMINAL ZONE



Development Zone	Description	Opportunities
Terminal		
Physical Site	This zone is located to the north side of the runway and occupies a narrow strip of land located between the airport access road and Alpha taxiway. The site is level and provides uninterrupted views across the runway.	There are limited opportunities due to the linear nature of the site and the existing terminal operations.
Infrastructure:		
Access	The terminal zone provides key points of access for Airport services to the terminal, offices and for authorised vehicles onto the airside. Passenger access to the terminal drop off and parking, the offices and the ATC tower are located off the Airport access road. The control point onto airside is located adjacent to NH2,	The Airport access road provides the main route into the Airport. This route has been identified as acceptable to maintain current and small growth volumes. Some minor highway enhancements have been identified to improve the current arrangements.
Services	This zone is currently well served by existing utility services.	Improvements to service connections to power new facilities can be undertaken.

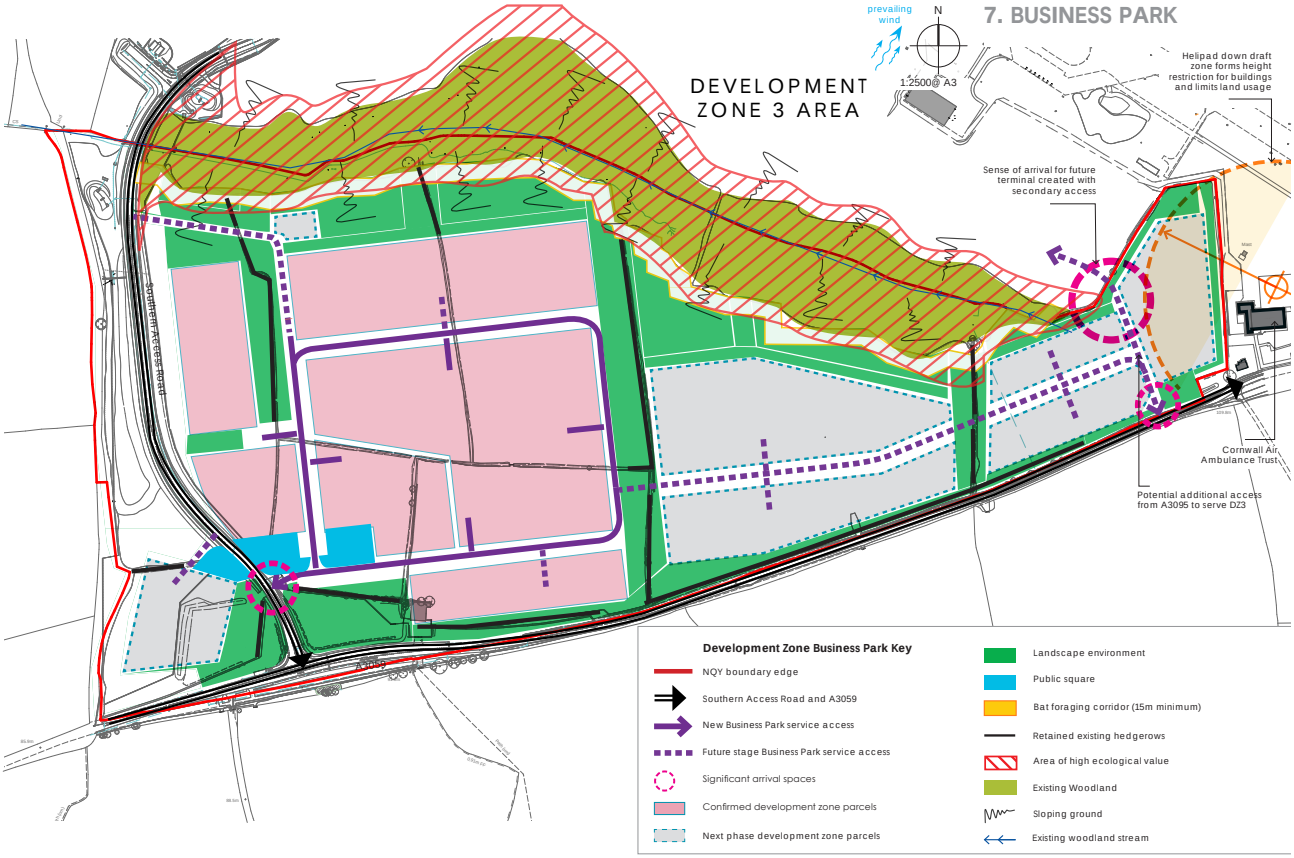
Drainage	Foul drainage connects to local public systems drained via St Mawgan Village.	Foul drainage is intended to continue to drain via the public system to St Mawgan. Surface water may require a more detailed SUDS approach. The full strategy is identified within the surface-water management plan report.
Runway / Aviation	The terminal fronts Alpha apron, which connects to Alpha taxiway serving the runway. Hangars NH1 and NH2 are connected to the Apron.	Direct access to Alpha taxiway and runway exist. Small improvements have been identified to maintain the standard of these areas.
Property / Building Assets	Within the terminal zone are the terminal, the northern hangars (NH1 and NH2), fuel farm, air-traffic control tower, car-hire garage, along with other smaller ancillary buildings. All these buildings provide critical facilities central to the Airport's operation.	Most of the principal buildings have been surveyed. Their condition is good and will continue to provide the functions for which they are designed. Minor maintenance and improvements have been identified for the terminal building should passenger numbers increase.
Environmental:		
Landscape	There are few landscape features within this Terminal Zone. Minor verges and planting are associated with the Terminal building in and around the drop-off zone.	The landscape areas which form part of the arrival experience are considered in need of improvement to enhance the Airport experience. Minor modifications could be undertaken as part of enhancements planned for the terminal zone.
Ecological	There are no areas defined as ecologically important within the terminal zone.	N/A
Historic	There are no areas defined as historically important within the terminal zone.	N/A



Development Zone	Description	Opportunities
North Zone		
Physical Site	This zone is located to the north side of the runway and occupies the area of land to the east of the terminal zone and south of the Northern Loop zone. The site historically formed part of the cross-field runways. These are redundant but remain in place. The site is level and provides uninterrupted views across the runway to the south and to the wider landscape in the north.	The site is suitable for small scale aviation development.
Infrastructure:		
Access	Access to the site is gained via the Airport access road and from the same junction serving the ATC tower and temporary office units. A control-point access is provided to the Northern Loop limiting access to airside areas such as Charlie North, Bristow SAR hangar and AFSS.	The site is suitable for aviation development and is well connected to local infrastructure.
Services	This zone currently connects to services that serve the Terminal Zone, providing adequate utility services.	The site is suitable for aviation development and is well connected to local services.

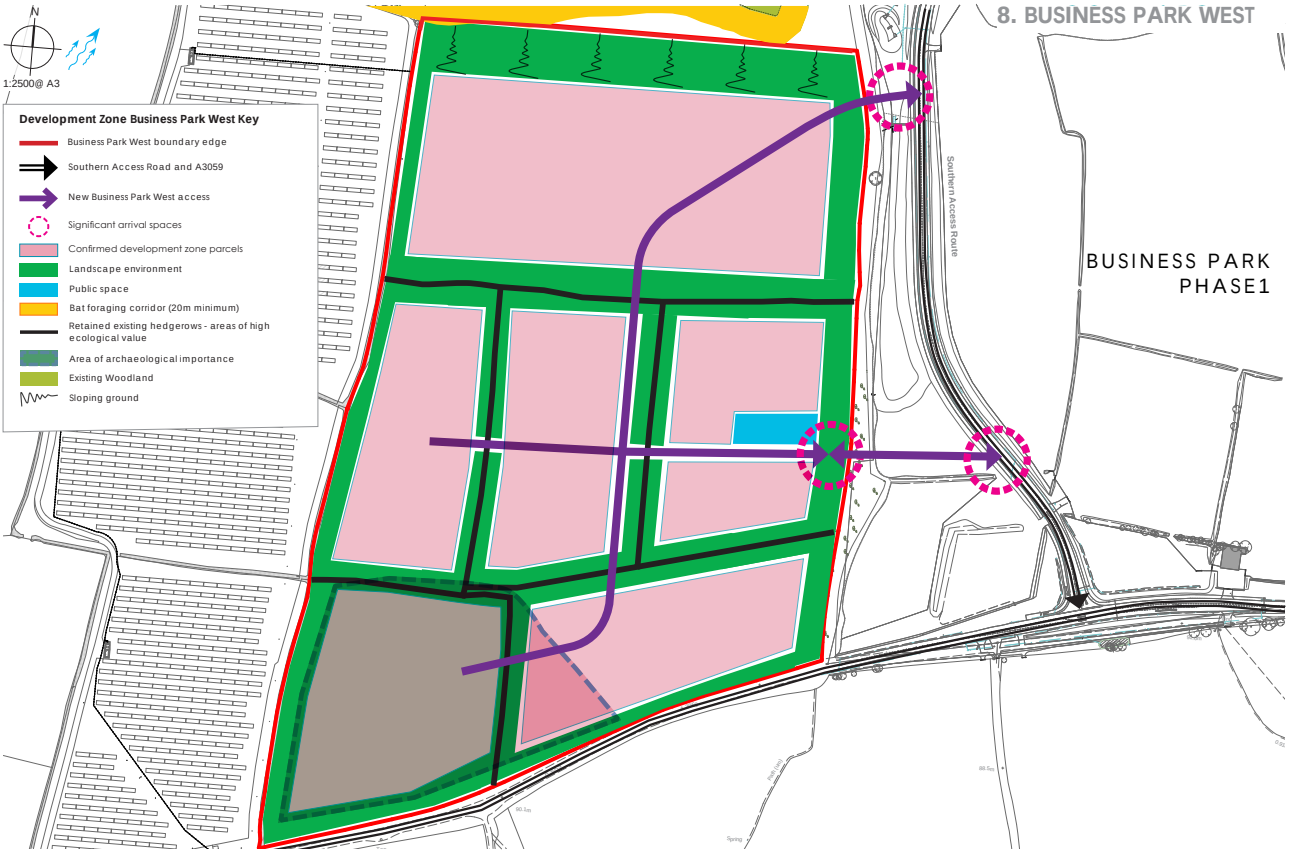
Drainage	Foul drainage connects to local public systems drained via St Mawgan Village. There is limited information on existing surface-water drainage in this area.	Foul drainage is intended to continue to drain via the public system to St Mawgan Village. Surface water may require a more detailed SUDS approach. The full strategy is identified within the SWMP report.
Runway / Aviation	The southern edge of this zone fronts the Alpha taxiway serving the runway.	Direct access to Alpha taxiway and Charlie North. Small improvements have been identified to maintain the standard of these areas. Minor connective hard standing areas could be provided to connect all parts of this zone.
Property / Building Assets	There are no buildings located within this zone	N/A
Environmental:		
Landscape	The site is characterised by maintained landscape areas that form the surrounding verges of the alpha taxiway and disused runways.	Improved landscape areas should meet aviation requirements.
Ecological	There are no areas defined as ecologically important within the north zone.	N/A
Historic	There are no areas defined as historically important within the north zone.	N/A
Northern Loop		
Physical Site	This zone is located to the far north side of the Airport boundary.The site historically formed part of the intersection of two cross-field runways. These are now disused but remain in place. The site is almost level and provides uninterrupted views across the runway and panoramic views to the wider landscape in the north.	The site is currently identified as a non-Development Zone within the LDO due to other development zones being more suitable. Where further more extensive development is required at the Airport, then this site would be suitable for a range of facilities that would complement adjacent aviation uses
Infrastructure:		
Access	Access to the site is gained via the Airport access road and from the same junction serving the ATC tower and St Mawgan house. The Northern Loop is airside.	The site is located close to local infrastructure
Services	There are limited services within this zone. This zone currently connects into services that serve the terminal zone, providing adequate utility services.	The site is suitably located and well connected to local services.

Drainage	Foul drainage connects to local public systems drained via St Mawgan. There is limited information on existing surface-water drainage in this area but surface water drains towards the lower land that edges the site.	Foul drainage is intended to continue to drain via the public system to St Mawgan. Surface water may require a more detailed SUDS approach. The full strategy is identified within the SWMP eport.
Runway / Aviation	The disused cross-runways extend into this area. Charlie North being retained as apron for the UK Air Search and Rescue facility. Charlie North is licenced and in use	Direct access to Charlie North provides opportunities for connection to the runway.
Property/Building Assets	The only large building within this area is the new UK Search and Rescue facility. This is located adjacent to Alpha taxiway in the zone's most south-east corner. The Airport Fire Station is located adjacent to this to the east, just outside the site.	N/A
Environmental:		
Landscape	The Northern Loop covers an area of high ground forming a local plateau located within the north of the Airport site area. The surrounding land falls away to the north and east into scrub woodland, and west into Carloggas village. The wooded areas are restricted to the zone edges, but are not continuous.	Improved landscape areas should meet aviation regulations.
Ecological	The scrub woodland identified and located in broken groups along the perimeter is identified to be of high ecological value.	Efforts to retain and enhance this woodland belt should be considered as part of more extensive works to improve the landscape screening of the Airport.
Historic	There are no buildings or structures of historical value within this site. Adjacent to the site and to the east outside of the boundary lies Carnanton House a Grade II listed building.	Any potential opportunities for development should also consider potential impact on the neighbouring Carnanton House.



Development Zone	Description	Opportunities
Business Park (Phase 1 and East)		
Physical Site	The Business Park (Phase 1 and East) are located on the south side of the Airport and is sandwiched between the wet woodland valley that separates the development area from the airfield plateau to its north, and the A3059 to the south. The Cornwall Air Ambulance Trust hangar is located adjacent to the site on its most eastern corner. The site sits on the brow of a shallow ridge, one of a series running east-west towards the coast that shelter shallow valleys. The site straddles the ridgeline running east to west, with the north falling towards the shallow wooded valley. Its high point is located approximately at the SAR entrance. The Business Park infrastructure is under construction with the eastern phase area retained as fields.	The Business Park is part of Aerohub. It has an LDO and infrastructure is under construction. Completion October 2015
Infrastructure:		
Access	Construction onsite. Completion October 2015	
Services	Construction onsite. Completion October 2015	

Drainage	Construction onsite. Completion October 2015	
Runway / Aviation	N/A	N/A
Property / Building Assets	There will be serviced plots on this site.	Serviced plot locations have been planned as part of the Business Park development design code are due for implementation.
Environmental:		
Landscape	Construction onsite. Completion October 2015.	Retention of existing features has been considered as part of the Business Park. Landscape character mitigation aims to enhance existing retained elements and meet the requirements of the Business Park.
Ecological	The area of wet woodland along the existing valley floor to its north has been identified as an area of High Ecological Importance with potential to support wildlife. The Cornish hedges running through the site are also important to wildlife.	The existing valley, wet woodland and grassland areas will enhance habitat and create a distinctive landscape environment to the development.
Historic	There are no areas of important historical interest within the site.	N/A



Development Zone	Description	Opportunities
Business Park (West)		
Physical Site	The Business Park (West) is located on the south side of the Airport and is sandwiched between the wet woodland valley, that separates the development area from the airfield plateau to its north, and the A3059 to the south. It is separated from Business Park Phase 1 by the SAR. The site sits on the brow of a shallow ridge, one of a series running east-west towards the coast that shelter shallow valleys. The site straddles the ridgeline running east to west, with the north falling towards the shallow wooded valley. Its high point is located approximately at the Southern Access Road entrance.	Business Park West has been identified as a suitable location for future Business Park development. It is located to the east of Solar Farm.
Infrastructure:		
Access	A dedicated junction could provide direct access to the site from the SAR which is served off the A3059.	Access into this area could be located in one of two locations. Further assessment is needed to define a suitable access.
Services	There are currently no main services to the site.	Services to be planned as part of its implementation.

Drainage	A new pumped sewage connection for the Business Park (phase 1) is proposed to be provided with a rising main along the A3059 to St Columb Minor, some 3.5km to the west, under a requisition with SWW.	Services to this site would have to be planned for along with future Business Park developments.
Runway / Aviation	N/A	N/A
Property / Building Assets	There are no serviced plots on this site.	Serviced plots could be planned as part of the wider Business Park expansion.
Environmental:		
Landscape	The landscape consists of grassland pasture, and Cornish hedgerows which run across the site area. Boundaries are relatively sparse with lightly vegetated Cornish hedges.	Retention of existing features could be considered as part of its development. Landscape character mitigation should aim to enhance existing retained elements and meet the requirements of development.
Ecological	The area of wet woodland along the existing valley floor to its north has been identified as an area of High Ecological Importance with potential to support wildlife. The Cornish hedges running through the site are also important to wildlife.	The existing valley, wet woodland and grassland areas offer opportunity to enhance habitat and create a distinctive landscape environment to complement any development.
Historic	To the south west of the site along the A3059 an area of archaeological interest has been identified. Reference should be made to the Sustainability Appraisal ¬ HEA 'Newquay Cornwall Airport: Historic Environmental Assessment and Characterisation', CC, 2011 (appendix 14.12).	Historic recording to take place to enable development.

11.3 Airport Development Strategy

11.3.1 As part of the Masterplan, mechanisms to improve standards and efficiencies have been considered along with the assessment of economic outcomes. The growth forecast analysis, Development Zone frameworks and terminal assessments within this report have collectively provided evidence to determine the strategies to implement. The illustrated strategies, provide identification of key deliverable projects suitable for the 2014-2020 ERDF Convergence Programme.

11.3.2 To assess the options for development, the work undertaken has been considered within the following categories:

- Passenger Capacity
- Terminal Capacity
- Terminal Parking
- Airport Operations Equipment
- Transport–Surface Access Strategy (SAS)
- Property and Building Conditions
- Environmental and other development constraints
- Access and services
- Supply and demand
- Planning

11.4 Airport Development Strategy 0–5 Years

11.4.1 Within the next five years it will be necessary to address the following:

Operational Airport

- Undertake important operational regulatory requirements, and facility upgrades to safeguard current Airport terminal standards.
- Improve connections with business through promotion of facilities.
- Implement small-scale Travel Plan measures to improve awareness of connectivity to the Airport.
- Designate and safeguard a potential southern terminal location for long-term planning.
- Plans for growth to be programmed by the Management team.

Aerohub EZ

- Continued promotion of the Airport and the EZ to support the diversification and growth of this nationally important asset as a place for aerospace inward investment and aerospace growth.
- Take Aerohub into the next delivery phase – implementation and investment.
- Support the Airport to attract, grow and secure long term investment.

- Develop aerospace business space and wider economic activity thus reducing the operating subsidy to the Operator, which the Owner currently provides
- Support the Airport operations to grow and promote business use of the Airport via improved connectivity, in particular SME access
- Attract and grow important existing, emerging sectors and associated technologies such as space and the UAS sector
- Accelerate programme of direct intervention to address skills gap
- Keep planning and investment Frameworks current
- Deliver infrastructure for growth
- Ensure future projects are developed to maximise the level of investment from programmes such as ERDF and this will ensure the impacts from previous investments are maximised

11.5 Airport Development Strategy 5–15 years

11.5.1 Within the next five to ten years it will be necessary to address the following:

- Undertake important operational regulatory repairs and carry out remodelling small areas of the existing terminal, to accommodate passenger growth and to maintain a positive passenger experience
- Improve connections with business to aid commerce
- Implement wide-scale Travel Plan measures to accommodate assumed increased traffic resulting from improved passenger and commercial activity
- Further assess and plan a potential southern terminal for future delivery
- Continue management programme of planned growth
- Continue to promote the benefits associated with the Airport as an aviation hub

11.6 Costs and Revenues

11.6.1 Cost analysis and market evaluation has been undertaken for each of the Masterplan Development Zones as an aid to focus potential revenue generation and delivery of economic outcomes.

11.6.2 By using income forecasts and by identifying potential funding opportunities from European, central Government and local council resources, specific business opportunities can be progressed to support the aspirations of this Masterplan.

11.6.3 The more certain a Masterplan development strategy can be, the more investment opportunities can be sought and it is through the Development Zone strategies, Aerohub EZ and the LDOs that provide the framework for growth and investment. Collectively these provide financial incentive tools to facilitate the growth of the Airport.

11.7 New Terminal Strategy

11.7.1 Terminal location appraisal captures the key triggers associated with the options. These are tabulated below and can be summarised as:

- **Option 1a** - Do nothing, minor repairs to terminal, retain in its current location
- **Option 1b** - Minor refurbishment and expansion of terminal to meet needs of capacity forecast
- **Option 1c** - Expansion of existing terminal location to improve space standards
- **Option 2** - New southern terminal to future-proof terminal standards at a regional level, to help facilitate a business environment and to present the Airport as an aviation and aerospace hub

11.7.2 In order to process the decisions required to maintain and future proof the Airport, the option assessment has been categorised into the following actions:

- **NO CHANGE** - Operation and function of Terminal building and equipment meets current passenger numbers
- **ASSESSMENT STUDY** - Commissioning of work to assess, design and cost the changes required to meet increased passenger numbers
- **IMPLEMENT** - Assessment study projects to be planned, undertaken and phased, to meet increased passenger numbers and promote further growth

11.7.3 Based upon the research undertaken in preparing the Masterplan, during the remaining 2015–2030 period the terminal will remain in its current location. Passenger numbers are forecast to increase which is likely to place further pressure on the existing terminal building in its current form. However, through careful management and control and the implementation of measures to improve the existing facilities, passenger numbers at the existing terminal are able to increase significantly before reaching a critical capacity point.

The works and actions identified are included in the following Terminal Options Section 11.8.

Cornwall Airport Newquay Artist's Impression - 2030

11.8 Terminal Options Table

KEY TRIGGERS	OPTION 1 A - DO NOTHING + MINOR REPAIRS	
	KEY ISSUES	POTENTIAL ACTIONS
(1) PASSENGERS CAPACITY (mppa)		
Passenger forecasts defined by Masterplan 2008-2030 identified near 0.4mppa (Million passengers per annum) in 2008. Current figures for 2015/16 identify 0. 240 mppa. Current 'High' scenario prediction are 0.6mppa by 2030.	While the current facility is designed to accommodate circa 0.45mppa, a peak in August 2008 saw 66,000 passengers recorded and indicates the potential actual capacity of the terminal at 0.70mppa. At this peak, important issues and areas of failure were identified which could impact on the ability of the Airport to continue to deliver an IATA C level service, as identified in the Masterplan 2008-2030.	Based on the following assumptions, no further operational enhancements will be undertaken. 'High' scenario levels for passengers are forecast at 0.323mppa by 2016. 'Base' scenario levels for passengers are forecast at 0.295mppa by 2016. 'High' scenario levels for passengers are forecast at 0.6mppa by 2030. 'Base' scenario levels for passengers are forecast at 0.473mppa by 2030.
(2) TERMINAL CAPACITY		
Maintain existing terminal building at 1600sqm.	A key issue with the existing terminal remains the need to smooth the peaks thus reducing check-in congestion due to increased number of check in desks. With increased flight services/passenger numbers forecast, the existing terminal will experience potential operational problems creating lower levels of service and passenger comfort as defined by IATA Levels. Key Issues are recorded as: Insufficient seating within land side departures. Insufficient toilet facilities within both land side and air side departure halls. Insufficient security scanning facilities. Outdated baggage handling facilities. Limited staff welfare areas. Limited retail provisions both land and air side. No land side meeting rooms or business facilities. Outdated CCTV. All heating is electrical.	Based on the current terminal area of 1,600sqm, it is calculated to accommodate 0.45mppa. This translates as 3.55sqm of terminal space per person. While the identified peak service caused operational issues, this was considered an unusual peak and as such the terminal could continue to operate within its current form, delivering an IATA C Level service. This level of service may reduce if various issues are not solved. Therefore minor repairs and reconfigurations have been considered as part of this proposal.
(3) TERMINAL INFRASTRUCTURE		
• Entrance		
Departure and arrivals expanded updated in 2008. Terminal drop-off and arrival configuration altered due to new anti-terrorism safety measures. These have compromised the arrival experience.	The new entrance area creates a dual access into the terminal via the original entrance. This provides an external link from arrivals back to departures. There is no footpath along Ball Lane to access the terminal. Passengers walk uncomfortable distances with baggage, to/from their vehicles in exposed weather. This lowers the level of service and passenger comfort as defined by IATA Levels. The overall sense of way finding has been compromised and could be improved.	A detailed assessment of existing arrival, entrance and departure, pick-up configurations should be undertaken. This would identify areas where potential enlargement of the current layout could be undertaken to increase capacity and improve way finding and the sense of arrival.
• Utility services	The terminal is not serviced by a gas supply.	No planned changes.

KEY TRIGGERS	OPTION 1 A - DO NOTHING + MINOR REPAIRS	
	KEY ISSUES	POTENTIAL ACTIONS
(4) TERMINAL PARKING		
Terminal carpark layout is served with two zones located either side of the terminal building labelled as 'east ' and 'west', providing a total of 544 spaces.	The parking capacity is often full and any further expansion west of the 'west' zone would create unacceptable distances from the terminal. Any further scheduled flight services would create regular parking capacity issues.	No planned changes.
(5) AIRPORT OPERATIONS EQUIPMENT		
• The main equipment facilities used within the terminal are: • Check-in desks • Self-service check-in kiosks	There are eight check-in desks, which are not fully occupied except on Saturdays. An average of five desks are used at peak times. There are two self- service check-in machines specifically for Flybe.	No planned changes. Potential to increase the number of self-service check-in kiosks at a low cost.
• Baggage handling machine • Baggage hold screen equipment	The baggage handling machines are prone to frequent break downs and problems. This results in baggage being handled manually as there is no back up machine. This causes regular delays each month. The baggage handling bay is exposed to inclement weather conditions and as such, the x-ray equipment sensitive to moisture and saline air malfunctions.	The x-ray equipment is due for replacement. A like for like facility has been costed.
• Passenger security zone and x-ray scanners	Security zone consists of two x-ray machine and one passenger scanner. There are queues to process security search on each flight, and delays to passenger movement if large aircraft are scheduled together. . This compromises and creates lower levels of service and passenger comfort as defined by IATA Levels.	No planned changes.
• Flight services and management information systems	Updated as part of IDS2.	Currently being replaced.
(6) TRANSPORT (SAS)		
• Gateway Access	Existing access off Ball Lane.	No planned changes.
• Car parking	As above.	No planned changes.
• Off site Highways	Additional road improvements may be required further afield and will be identified as part of study.	No planned changes.
• Traffic Calming	Selective traffic calming schemes to mitigate increased traffic in sensitive areas, eg villages / local lanes,	No planned changes.
• Walking and Cycling	Local routes are not connected between Airport and residential areas.	No planned changes.
• Bus Links / Park and Ride	Existing bus services to be linked with terminal drop-off, Newquay expansion zone and potential park and ride.	No planned changes.
• Travel Plan	Local routes and opportunities while well provided for are not promoted adequately.	Implement small scale Travel Plan measures.
(7) PROPERTY / BUILDING CONDITION		
• Terminal	Original structure completed in circa 1994. New arrivals extension completed in 2008. Recent refurbishment of building and MEP services in 2012/2013.	Minor repairs needed as part of ongoing maintenance. No major changes planned.

KEY TRIGGERS	OPTION 1 A - DO NOTHING + MINOR REPAIRS	
	KEY ISSUES	**POTENTIAL ACTIONS**
• Fuel Farm	This facility has been recently upgraded.	No planned changes.
• NH1	Hangar NH1 refurbished in 2009 and 2011.	No planned changes.
• NH2		No planned changes.
• Air Traffic Control	Completed in 2008. In reasonable condition for age.	Minor maintenance and repair works need to be evaluated. No planned major changes.
• Airport Fire Service Station	Completed in 2009. In excellent condition.	No planned changes.
(8) ENVIRONMENTAL		
• Communities and Health	No opportunity to move terminal away from communities at Carloggas and St Mawgan.	No change to existing terminal location.
• Landscape and Historic Environment		No change to existing landscape and no effects on historic assets although limited opportunities for improvement.
• Biodiversity		No change to existing biodiversity.
• Water Environment		No change to flood or pollution risk. No change to foul discharge or water supply.
• Air Quality, Energy Use and Green House Gas Emissions	Provides opportunity to improve energy performance	Consider energy efficiency measures and use of alternative energy sources such as anaerobic.
• Materials and Waste	Use of existing infrastructure minimises use of new materials and reduces waste.	
• Land Use Quality	Maximises use of previously developed land although there is limited opportunity to improve.	

KEY TRIGGERS	OPTION 1 B - MINOR REFURBISHMENT AND EXPANSION	
	KEY ISSUES	POTENTIAL ACTIONS
(1) PASSENGERS CAPACITY (mppa)		
Passenger predictions defined by Masterplan 2008-2030 identified near 0.4mppa (Million passengers per annum) in 2008. Current figures for 2015/16 identify 0.240mppa. Current 'High' scenario prediction are 0.6mppa by 2030.	While the current facility is designed to accommodate circa 0.45mppa, a peak in August 2008 saw 66,000 passengers recorded and indicates the potential actual capacity of the terminal at 0.70mppa. At this peak, important issues and areas of failure were identified which could impact on the ability of the Airport to continue to deliver an IATA C level service, as identified in the Masterplan 2008-2030.	Based on the following assumptions, minor refurbishment and expansion has been proposed to accommodate passenger capacity. 'High' scenario levels for passengers are forecast at 0.323mppa by 2016. 'Base' scenario levels for passengers are forecast at 0.295mppa by 2016. 'High' scenario levels for passengers are forecast at 0.6mppa by 2030. 'Base' scenario levels for passengers are forecast at 0.473mppa by 2030.
(2) TERMINAL CAPACITY		
Maintain existing terminal and expand building from 1600sqm to 4800sqm. This is based on improved spatial standards of delivering 8sqm per person for 0.6mppa by 2030.	A key issue with existing terminal remains the need to schedule flights apart, to avoid more than one flight service check-in slot. With increased flight services/passenger numbers forecast, the existing terminal will suffer operational problems and compromises and creating lower levels of service and passenger comfort as defined by IATA Levels. Key Issues are recorded as: • Insufficient seating within land side departures. • Insufficient ablutions within both land side and air side departure halls. • Insufficient security scanning facilities. • Outdated baggage handling facilities. • Limited staff welfare areas. • Limited retail provisions both land and air side. • No land side meeting rooms or business facilities. • Dated CCTV. • All heating is electrical.	Based on the current terminal area of 1,600sqm, it is calculated to accommodate 0.45mppa. This translates as 3.55sqm of terminal space per person. While the identified peak service caused operational issues, this was considered an unusual peak and as such the terminal could continue to operate within its current form, delivering an IATA C Level service. This level of service may reduce if various issues are not solved. Minor repairs of the terminal building to improve operational standards both land side and air side includes: • More seating areas. • Increase number of toilet facilities. • Another security channel. • Expanded updates baggage handling. • New staff welfare facilities. • Increased retail provision. • Added meeting rooms or business facilities. • Combined heat and power plant potential, using alternative energy sources.
(3) TERMINAL INFRASTRUCTURE		
• Entrance		
While the departure and arrivals experience was updated in 2008. The terminal drop-off and arrival configuration has recently been compromised through new anti-terrorism safety measures which have compromised the arrival experience.	The new entrance area creates a dual access into the terminal via the original entrance. This provides an external link from arrivals back to departures. There is no footpath along Ball Lane to access the terminal. Passengers walk uncomfortable distances with baggage, to/from their vehicles in exposed weather. This lowers the level of service and passenger comfort as defined by IATA Levels. The overall sense of way finding has been compromised and could be improved.	A detailed assessment of existing arrival, entrance and departure, pick-up configurations should be undertaken. This would identify areas where potential enlargement of the current layout could be undertaken to increase capacity and improve way finding and the sense of arrival.

KEY TRIGGERS	OPTION 1 B - MINOR REFURBISHMENT AND EXPANSION	
	KEY ISSUES	**POTENTIAL ACTIONS**
• Utility services	The terminal is currently served by all services, except for gas.	Consideration for a combined heat and power plant located at Airport.
(4) TERMINAL PARKING		
Terminal carpark layout is served with two zones located either side of the terminal building labelled as 'east ' and 'west', providing a total of 544 spaces. The Masterplan 2008-30 indicated early IDS work to deliver a further 620 spaces, providing a total 1164spaces.	The parking capacity is often full and any further expansion west of the 'west' zone would create unacceptable distances from the terminal. Any further scheduled flight services would create regular parking capacity issues.	Re-configuration of the parking layout to accommodate future capacity is required. Various parking calculation methods have been used and a predicted 25% increase to 680 spaces, is considered to provide medium-term growth capacity.
(5) AIRPORT OPERATIONS EQUIPMENT		
The main equipment facilities used within the terminal are: • Check-in desks • Self-service check-in kiosks	There are eight flight check-in desk, which are not fully occupied. An average of five desks are used at peak times. There are two self-service check-in machiens specifically for Flybe.	No planned changes. Potential to increase the number of self-service check-in kiosks at a low cost.
• Baggage handling machine • Baggage hold screen equipment	The baggage handling machines are prone to frequent break downs and problems. This results in baggage being handled manually as there is no back up machine. This causes regular delays each month. The baggage handling bay is open and orientated towards the prevailing wind and aircraft stands. As such, the x-ray equipment sensitive to moisture and saline air malfunctions.	The x-ray equipment is due for replacement. A like for like facility has been costed.
• Passenger security zone and x-ray scanners	Security zone consists of two x-ray machine and one passenger scanner. There are queues to process security search on each flight, and delays to passenger movement if large aircraft are together. This compromises and creates lower levels of service and passenger comfort as defined by IATA Levels.	Inclusion of a new security search isle within an enlarged area.
• Flight services and management information systems	Updated as part of IDS2	No requirement for further upgrades.
(6) TRANSPORT (SAS)		
• Gateway Access	Existing access off Ball Lane.	No planned changes.
• Car parking	As above.	No planned changes.
• Off site Highways	Additional road improvements may be required further afield and will be identified as part of study.	As above.
• Traffic Calming	Selective traffic calming schemes to mitigate increased traffic in sensitive areas, eg villages / local lanes,	No planned changes.
• Walking and Cycling	Local routes are not connected between Airport and residential areas.	No planned changes.
• Bus Links / Park and Ride	Existing bus services to be linked with terminal drop-off, Newquay expansion zone and potential park and ride.	Implementing minor walking/cycling measures.
• Travel Plan	Local routes are well provided for but not promoted adequately.	Implement travel plan measures.

KEY TRIGGERS	OPTION 1 B - MINOR REFURBISHMENT AND EXPANSION	
	KEY ISSUES	POTENTIAL ACTIONS
(7) PROPERTY / BUILDING CONDITION		
• Terminal	Original structure completed in circa 1994. A New arrivals building was completed in 2008. Recent refurbishment of building and an upgrade of M&E services was undertaken in 2012/2013.	Minor repairs needed as part of ongoing maintenance. Extended facility by 533sqm to accommodate 0.6mppa, calculated at 3.55sqm per person.
• Fuel Farm	This facility has been recently upgraded.	No planned changes.
• NH1	Hangar NH1 refurbished in 2009 and 2011.	No planned changes.
• NH2		No planned changes.
• Air Traffic Control	Completed in 2008. In reasonable condition for age.	Minor maintenance and repair works need to be evaluated. No planned major changes.
• Airport Fire Service Station	Completed in 2009. In excellent condition.	No planned changes.
(8) ENVIRONMENTAL		
• Communities and Health	No opportunity to move terminal away from communities at Carloggas and St Mawgan.	No change to existing terminal location.
• Landscape and Historic Environment		No change to existing landscape and no effects on historic assets although limited opportunities for improvement.
• Biodiversity		No change to existing biodiversity.
• Water Environment		No change to flood or pollution risk. No change to foul discharge or water supply.
• Air Quality, Energy Use and Green House Gas Emissions	Provides opportunity to improve energy performance.	Consider energy efficiency measures and use of alternative energy sources such as anaerobic.
• Materials and Waste	Use of existing infrastructure minimises use of new materials and reduces waste.	
• Land Use Quality	Maximises use of previously developed land although there is limited opportunity to improve.	Use of previously developed land, limited opportunity to improve sustainability through design.

KEY TRIGGERS	OPTION 1 C - EXPANSION EXISTING LOCATION	
	KEY ISSUES	POTENTIAL ACTIONS
(1) PASSENGERS CAPACITY (mppa)		
Passenger forecasts defined by Masterplan 2008-2030 identified near 0.4mppa (Million passengers per annum) in 2008. Current figures for 2015/16 identify 0.240 mppa. Current 'High' scenario prediction is 0.6mppa by 2030.	While the current facility is designed to accommodate circa 0.45mppa, a peak in August 2008 saw 66,000 passengers recorded and indicates the potential actual capacity of the terminal at 0.70mppa. At this peak, important issues and areas of failure were identified which could impact on the ability of the Airport to continue to deliver an IATA C level service, as identified in the Masterplan 2008-2030.	Based on the following assumptions, minor refurbishment and expansion has been proposed to accommodate passenger capacity. 'High' scenario levels for passengers are forecast at 0.323mppa by 2016. 'Base' scenario levels for passengers are forecast at 0.295mppa by 2016. 'High' scenario levels for passengers are forecast at 0.6mppa by 2030. 'Base' scenario levels for passengers are forecast at 0.473mppa by 2030.
(2) TERMINAL CAPACITY		
Provision of expanded terminal building from 1600sqm to 4800sqm. This is based on improved spatial standards of delivering 8sqm per 000's persons for 0.6mppa by 2030.	Key Issues to be resolved through A key issue with the existing terminal remains the need to With increased flight services/passenger numbers forecast, the existing terminal will experience potential operational problems creating lower levels of service and passenger comfort as defined by IATA Levels. • Key Issues are recorded as: • Insufficient seating within land side departures. • Insufficient toilet facilities within both land side and air side departure halls. Insufficient security scanning facilities. Outdated baggage handling facilities. Limited staff welfare areas. • Limited retail provisions both land and air side. • No land side meeting rooms or business facilities. • Outdated CCTV.	Extensive remodelling of the terminal building to improve operational standards both land side and air side includes: • More seating areas. • Increase number of toilet facilities. • Another security channel. • Expanded updates baggage handling. • New staff welfare facilities. • Increased retail provision. • Added meeting rooms or business facilities. • Combined heat and power plant potential, using alternative energy sources.
(3) TERMINAL INFRASTRUCTURE		
• Entrance		
The departure and arrivals experience was updated in 2008. The terminal drop-off and arrival configuration has recently been compromised through new anti-terrorism safety measures which have compromised the arrival experience.	The new entrance area creates a dual access into the terminal. The original entrance now provides an external link from arrivals back to departures. Passengers have to walk along Ball Lane to access the terminal or walk uncomfortable distances with baggage, in exposed weather, to/from their vehicles. This lowers the level of service and passenger comfort as defined by IATA Levels. The overall sense of way finding has been compromised and could be improved.	A new arrival, departure, pick-up configuration will be designed as part of expanded terminal to increase capacity flows, improve way finding and the sense of arrival.
• Utility services	The terminal is currently served by all services, except for gas.	Consideration for a combined heat and power plant located at Airport.

KEY TRIGGERS	OPTION 1 C - EXPANSION EXISTING LOCATION	
	KEY ISSUES	POTENTIAL ACTIONS
(4) TERMINAL PARKING		
Terminal carpark layout is served with two zones located either side of the terminal building labelled as 'east ' and 'west', providing a total of 544 spaces. The masterplan 2008-30 indicated early IDS work to deliver a further 620 spaces, providing a total 1164 spaces.	The parking capacity is often full and any further expansion west of the 'west' zone would create unacceptable distances from the terminal. Any further scheduled flight services would create regular parking capacity issues.	Re-configuration of the parking layout to accommodate future capacity is required. Various parking calculation methods have been used and a predicted 30% increase to 710 spaces, is considered to provide longer-term growth capacity.
(5) AIRPORT OPERATIONS EQUIPMENT		
The main equipment facilities used within the terminal are: • Check-in desks • Self service check-in kiosks	There are eight flight check-in desks, which are not fully occupied. An average of five desks are used at peak times. There are only two self service check-in machines specifically for Flybe.	Reduced check-in desks providing room for security expansion. Increase the number of self-service check-in kiosks at a low cost.
• Baggage handling machine • Baggage hold screen equipment	The baggage handling machines are prone to frequent break downs and problems. This results in baggage being handled manually as there is no back up machine. This causes regular delays each month. The baggage handling bay is open and orientated towards the prevailing wind and aircraft stands. As such, the x-ray equipment sensitive to moisture and saline air malfunctions.	The x-ray equipment is due for replacement and its arrangement redesigned to ensure future failures are limited.
• Passenger security zone and x-ray scanners	Security zone consists of two x-ray machine, one passenger scanner. There are queues to process security search on each flight, and delays to passenger movement if two scheduled flights. This compromises and creates lower levels of service and passenger comfort as defined by IATA Levels.	Inclusion of a new security search isle within an enlarged area.
• Flight services and management information systems	Updated as part of IDS2.	Expanded facilities to accommodate additional arrival and departure spaces.
(6) TRANSPORT (SAS)		
• Gateway Access	Existing access off Ball Lane.	Access point changed to improve circulation.
• Car parking	As above.	Reconfigure parking areas designed to accommodate proposed capacity. (As above)
• Off site Highways	Additional road improvements may be required further afield and will be identified as part of study.	Undertake local junction improvements and coordinated signage, should a need be identified to manage capacity and improve safety.
• Traffic Calming	Selective traffic calming schemes to mitigate increased traffic in sensitive areas, eg villages / local lanes,	Undertake local improvements should a need be identified to manage traffic and improve safety.
• Walking and Cycling	Local routes are not connected between Airport and residential areas.	Undertake local improvement to connect the Airport with Newquay and local areas. The design and upkeep of a wider network would include cycle lanes, cycle way, signage and crossings.

KEY TRIGGERS	OPTION 1 C - EXPANSION EXISTING LOCATION	
	KEY ISSUES	**POTENTIAL ACTIONS**
• Bus Links / Park and Ride	Existing bus services to be linked with terminal drop-off, Newquay expansion zone and potential park and ride.	Incorporate terminal drop-off as part of wider local bus service routes. Improved signage and promotion of local bus services.
• Travel Plan	Local routes are well provided for but not promoted adequately.	Implementation of a range of soft measures, eg car sharing and green travel plan promotion.
(7) PROPERTY / BUILDING CONDITION		
• Terminal	Original structure completed in circa 1994. A New arrivals building was completed in 2008. Recent refurbishment of building and an upgrade of M&E services was undertaken in 2012/2013.	Extended facility by 3200sqm to accommodate 0.6mppa, calculated at 3.55sqm per 000's persons.
• Fuel Farm	This facility has been recently upgraded.	No planned changes.
• NH1	Hangar NH1 refurbished in 2009 and 2011.	No planned changes.
• NH2		No planned changes.
• Air Traffic Control	Completed in 2008. In reasonable condition for age.	Minor maintenance and repair works need to be evaluated. No planned major changes.
• Airport Fire Service Station	Completed in 2009. In excellent condition.	No planned changes.
(8) ENVIRONMENTAL		
• Communities and Health	No opportunity to move terminal away from communities at Carloggas and St Mawgan.	No change to existing terminal location.
• Landscape and Historic Environment	Minor changes to terminal and entrance.	Change to landscape and lighting would need to be assessed through design.
• Biodiversity		No change to existing biodiversity.
• Water Environment		No change to flood or pollution risk. No change to foul discharge or water supply.
• Air Quality, Energy Use and Green House Gas Emissions	Provides opportunity to improve energy performance.	Consider energy efficiency measures and use of alternative energy sources such as anaerobic digestion.
• Materials and Waste	Use of existing infrastructure minimises use of new materials and reduces waste.	
• Land Use Quality	Maximises use of previously developed land.	Consider opportunity to improve sustainability through design (use of materials, water, energy etc)

KEY TRIGGERS	OPTION 2 - NEW SOUTHERN TERMINAL	
	KEY ISSUES	POTENTIAL ACTIONS
(1) PASSENGERS CAPACITY (mppa)		
High capacity 0.6 mppa 2030	Strategic relocation of a new terminal.	Purpose built terminal built on south side of runway at Development Zone 3 (DZ3). Based on the following assumptions of the 'High' scenario levels for passengers forecast at 0.6mppa by 2030.
(2) TERMINAL CAPACITY		
Provision of new terminal building.	Transfer of terminal facilities to the south of runway achieves the following: Creates a brand new terminal building. • Improves terminal access and arrival experience. • Future proofs an expanded Airport capacity serving upwards of 0.5mppa. • Improves public transport connections with Newquay. • Improves local journey times to Airport and reduce congestion along Newquay coastal road. • Improves commercial benefits through co-locating aviation business and tourism. • Removes local environmental concerns of current location.	Allocate area to safeguard a future terminal development location. Designing a future operational terminal zone, would provide the opportunity to coordinate with the Aerohub Business Park and Development Zones. This could potentially spread the future infrastructure costs of a new terminal across other business infrastructure activities associated with the Airport. The Masterplan framework would maximise the benefits of co-locating aviation facilities in the south of the airport site and would look to use existing hard services, structures and taxiways to minimise costs.
A new entrance will be served off the existing SAR (Southern Access Road)	There are no perceived issues with designing a new terminal layout for the southern zone.	A new purpose built terminal would be designed to provide facilities and safe guard against increased capacity.
(3) TERMINAL INFRASTRUCTURE		
Utility services	New service connections would be needed in DZ3.	Purpose built service capacity would be designed as part of new terminal.
(4) TERMINAL PARKING		
Using high capacity figures of 0.6 mppa, it is calculated that 665 spaces will be required.	There are no perceived parking issues with terminal services being located on DZ3.	All parking provision can be accommodated within zones DZ1 and DZ3. Should capacity ever exceed the high scenario figures for mppa, then further parking can be made available within the Business Park phase 2 area.
(5) AIRPORT OPERATIONS EQUIPMENT		
The main equipment facilities used within the terminal are: • Check-in desks • Self service check-in kiosks	There are no perceived issues with designing a new terminal layout for DZ3.	A new purpose built terminal would be designed to provide for all facilities and safe guard against increased capacity.
• Baggage handling machine • Baggage hold screen equipment	There are no perceived issues with designing a new terminal layout for DZ3.	A new purpose built terminal would be designed to provide for all facilities and safe guard against increased capacity.

KEY TRIGGERS	OPTION 2 - NEW SOUTHERN TERMINAL	
	KEY ISSUES	POTENTIAL ACTIONS
• Passenger security search zone and x-ray scanners	There are no perceived issues with designing a new terminal layout for DZ3.	A new purpose built terminal would be designed to provide for all facilities and safe guard against increased capacity.
• Flight services and management information systems	There are no perceived issues with designing a new terminal layout for DZ3.	A new purpose built terminal would be designed to provide for all facilities and safe guard against increased capacity.
(6) TRANSPORT (SAS)		
• Gateway Access	New SAR road exists to serve DZ1 and DZ3.	Utilisation of SAR road to access new terminal and supporting facilities, to include an improved signage strategy.
• Car parking	There are no perceived issues with designing a new terminal parking within the southern zone. (As above)	New purpose built parking areas would be designed to accommodate proposed capacity. (As above)
• Off site Highways	New SAR road junction from A3059 is designed to accommodate capacity. Additional road improvements may be required further afield and will be identified as part of study.	Undertake local junction improvements and coordinated signage, should a need be identified to manage capacity and improve safety.
• Traffic Calming	Selective traffic calming schemes to mitigate increased traffic in sensitive areas, eg villages / local lanes.	Undertake local improvements should a need be identified to manage traffic and improve safety.
• Walking and Cycling	Local routes are not connected between Airport and residential areas.	Undertake local improvement to connect the Airport with Newquay and local areas. The design and upkeep of a wider network would include cycle lanes, cycle way, signage and crossings.
• Bus Links / Park and Ride	Existing bus services to be linked with terminal drop-off, Newquay expansion zone and potential park and ride.	Incorporate terminal drop-off as part of wider local bus service routes. Improved signage and promotion of local bus services.
• Travel Plan	Local routes and opportunities while well provided for are not promoted adequately.	Implementation of a range of soft measures, eg car sharing and green travel plan promotion.
(7) PROPERTY / BUILDING CONDITION		
• Terminal	Original structure completed in circa 1994. New arrivals extension completed in 2008. Recent refurbishment of building and MEP services in 2012/2013.	A list of minor condition failures have been evaluated as part of survey. This building is suitable to be leased for other uses on construction of a new terminal.
• Fuel Farm	This facility would be decommissioned and a new one provided.	New facility built as part of terminal development in DZ3.
• NH1	Hangar NH1 refurbished in 2009 and 2011.	No requirement to alter. Location of terminal does not affect location of NH1.
• NH2		No requirement to alter. Location of terminal does not affect location of NH2.
• Air Traffic Control	Completed in 2008. In reasonable condition for age.	Minor maintenance and repair works need to be evaluated. Location of terminal does not affect location of ATC.
• Airport Fire Service Station	Completed in 2009. In excellent condition.	No proposals required. Location of terminal does not affect location of AFSS.

KEY TRIGGERS	OPTION 2 - NEW SOUTHERN TERMINAL	
	KEY ISSUES	POTENTIAL ACTIONS
(8) ENVIRONMENTAL		
• Communities and Health	Avoids disturbance to communities on north side, although closer to isolated residences on the south side. There is the opportunity for linkages with Newquay and Nansledan.	Design to look at minimising 'edge' effects (e.g. lighting, run-off, noise etc) to residences.
• Landscape and Historic Environment	Landscape features include wooded valley and hedgerows. Area is considered to be of 'high' archaeological potential. The Nimrod servicing area is of 'Very High' historic value.	Retention of woodland and hedgerows to be incorporated into design. Explore ways of retaining character of Nimord servicing area in design. Further assessments and mitigation required.
• Biodiversity	Potential for direct and indirect effects (e.g. from access provision, ancillary development) on BAP habitats, such as woodland and species which use it (e.g. bats, otter).	Retain features of high ecological value including hedgerows, areas of wetland habitats, running water and woodland. BAP sets out measures for enhancement.
• Water Environment	Situated near tributary of Porth Stream. No exising services for water supply and discharge of foul water, although some services delivered as part of Business Park.	Design needs to incorporate SUDs so that there is no increase in pollution or flood risk downstream. Need to consider foul water discharge and any opportunities for use of grey water.
• Air Quality, Energy Use and Green House Gas Emissions	There will be greater embodied carbon in new build but there are opportunities to incorporate renewable energy sources.	Opportunity to improve design of terminal to reduce energy use, through efficiency and use of alternatives such as anaerobic digestion, and reduce GHG emissions from surface transport.
• Materials and Waste	Use of materials through new building.	Opportunity to re-use or recycle existing buildings and hard standing. Consider choice of materials. Design will need to achieve cut/fill balance in areas of steep topography.
• Land Use Quality	Use of greenfield land, although potentially within existing airfield.	Opportunity to improve sustainability through design (use of materials, water, energy etc)

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11.9 Summary Trigger Flow Chart

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	PASSENGERS FORECAST PPA	TERMINAL CAPACITY	TERMINAL INFRASTRUCTURE	TERMINAL PARKING	AIRPORT OPERATIONS	TRANSPORT (SAS)	PROPERTY / BUILDING CONDITION	ENVIRONMENT
OPTION 1A	200 - 400	NO CHANGES	NO CHANGES	NO CHANGES	REPLACEMENT (Baggage X-ray)	ASSESSMENT STUDY (Travel plan measures)	MINOR REPAIRS (Maintenance)	NO CHANGES
OPTION 1B	400 - 450	ASSESSMENT STUDY (Terminal alterations / Safe guard southern zone)	ASSESSMENT STUDY (Arrivals / Departures)	ASSESSMENT STUDY (Expansion phasing)	ASSESSMENT STUDY (PHASE 1 Security / Check-in) (PHASE 2 Toilets / Welfare / Seating / Retail)	IMPLEMENT (Travel plan measures)	MINOR REPAIRS (Maintenance)	NO CHANGES
OPTION 1B PLUS	500	IMPLEMENT (Terminal alterations / Safe guard southern zone)	IMPLEMENT (PHASE 1 Arrivals / Departures)	IMPLEMENT (Parking 25% >)	IMPLEMENT (PHASE 1 Security / Check-in)	IMPLEMENT (Walking and cycling measures)	MINOR REPAIRS (Maintenance)	ASSESSMENT STUDY (CHP and green initiatives)
OPTION 1C	550	IMPLEMENT (Terminal alterations)	IMPLEMENT (PHASE 2 Arrivals / Departures)	IMPLEMENT (Parking 30% >)	IMPLEMENT (PHASE 2 - Toilets / Welfare / Seating / Retail)	IMPLEMENT (Local off-site highways improvements)	MINOR REPAIRS (Maintenance)	IMPLEMENT (CHP and green initiatives)
OPTION 2	600 +	IMPLEMENT (New terminal southern zone)	IMPLEMENT (Access roundabout to SAR and major utility connections)	IMPLEMENT (Parking 100%)	IMPLEMENT (New southern terminal building)	IMPLEMENT (Local off-site highways improvements)	IMPLEMENT (Terminal north conversion)	IMPLEMENT (CHP and green initiatives)

Key to triggers

NO CHANGE

Operation and function of Terminal building and equipment meets current passenger capacity numbers

ASSESSMENT STUDY

Commissioning of work to assess, design and cost the changes required to meet increased passenger capacity numbers

IMPLEMENT

Assessment study projects planned undertaken and phased, to meet increased passenger capacity numbers


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AERO HUB
AEROSPACE
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12.0

Community Engagement Summary

12.1 Community Engagement Summary

12.1.1 CC supports a proactive approach to public consultation and the Council's policies and commitments to consultation are set out in their own Statement of Community Engagement.

12.1.2 As part of the overall development of this Masterplan a consultation strategy was developed to set out how and when the NQY stakeholders and wider community could become involved.

12.1.3 Embodied within the commitment by CC to seek the views of both stakeholders and the wider community in major projects such as the Airport's development, is the desire to work with those directly affected by the proposed development.

12.1.4 The process has followed the fundamental principle that this Masterplan represents a partnership approach to development management. This requires an approach to consultation which seeks support and ownership for the concept of this Masterplan and its objectives, both among the participants and the community's wider stakeholders.

12.1.5 This Masterplan was presented for public consultation over a 7.5 week period commencing on 30th November 2014 and ending on 23rd January 2015. Part of this public consultation involved two staffed open events held at the Airport on the 30th November 2014 (12:00 – 19:30) and 1st December 2014 (06:00 – 19:00).

12.1.6 Following the formal open events the presentation boards were located and displayed at three separate CC offices (Truro One Stop Shop on 16th December 2014 for a week, Penzance Library on 8th-13th December 2014 and Bodmin Library and One Stop Shop on 5th-11th January 2015). In addition and in order to reach as wide an audience as possible all material was available on the Council's website from the 30th November 2014. The presentation information can be found at appendix 14.28.

12.1.7 The responses have been recorded on a colour coded spreadsheet indicating whether the consultee is in support, is neutral in opinion or not in support. This spreadsheet is included with the Statement of Community Engagement, forming part of this report in appendix 14.28.

12.1.8 All of the comments received have been considered as part of this Masterplan.

12.1.9 In general, there were not many responses received as a result of the consultation. The majority of respondents (56%) were positive about this Airport Masterplan and were supportive of its proposals, 28% were neutral in opinion and 16% raised objections/concerns.

13.0
Conclusions & Recommendations

13.0 Conclusions and Recommendations

Cornwall Airport Newquay is a vital part of Cornwall's transport infrastructure, providing national and international connectivity to and from Cornwall. When combined with road and rail, the Airport supports a more resilient transport system for Cornwall, providing speed and choice for business, residents and visitors.

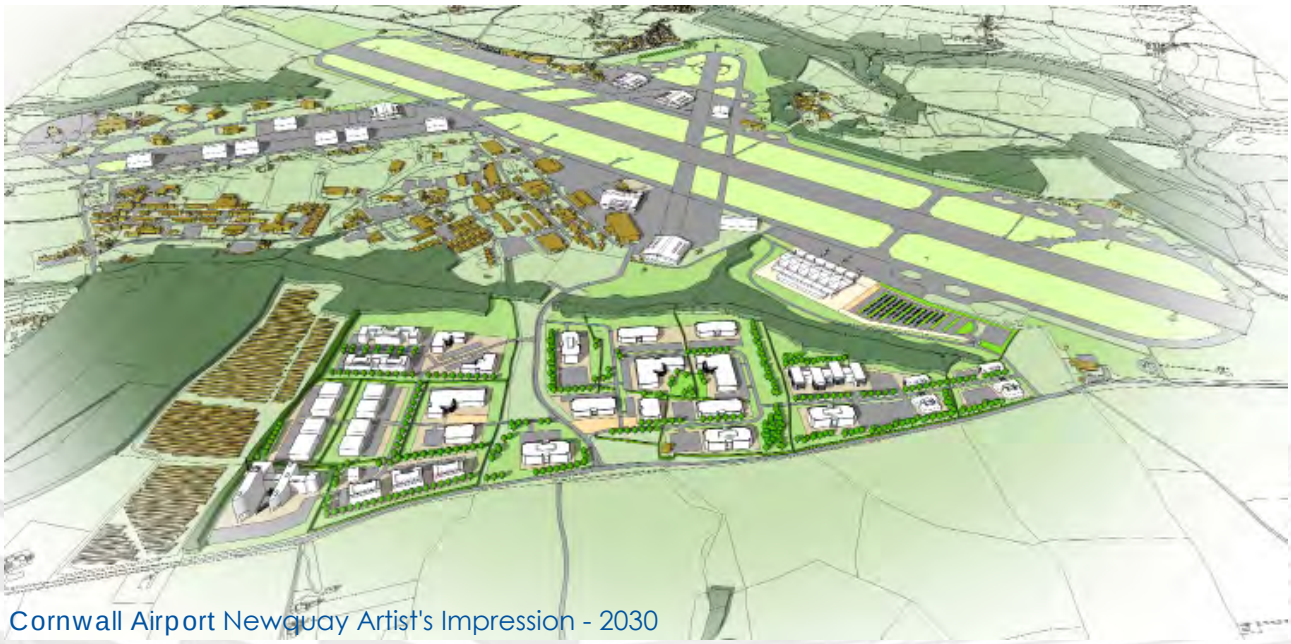
The Airport makes a substantial contribution of over £48m to the Cornish economy in terms of its Gross Value Added (GVA) output. Over 700 skilled jobs are directly dependent upon Airport operations.

In the wider context of the aerospace sector, NQY now supports one of the largest aerospace clusters (outside Bristol) in the West of England with a number of global businesses operating from the Airport. There are 14 companies employing 450 people on the airport site.

The growth in jobs at NQY is further supported through national economic policy. The Airport was awarded Enterprise Zone (EZ) status in 2011 and the Aerohub EZ became operational in 2012. Since then, 8 new companies have created or safeguarded over 200 jobs. By 2030 over 2,200 jobs and £162m of GVA could be generated from the EZ including the developing Business Park.

The recent global economic recession resulted in the worst decline in aviation growth for over three decades and this had a significant impact on the existing passenger projections and development plans. The Masterplan has been developed against the back drop of domestic and global economic recovery, and in particular an improving Aviation sector which will provide the opportunity for realistic and sustainable growth at the Airport.

NQY has experienced passenger growth in the previous 2 years and this is a trend, which is expected to continue. The security of the London Gatwick service being secured coupled with other core routes such as Manchester, Isles of Scilly and Birmingham provide a solid foundation against which growth is forecast.



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With exciting contracts now in place and new opportunities to be grasped such as the UK's Governments focus on creating a UK Spaceport, Cornwall Council is committed to the Airport's sustainable development and further steps will now be taken to promote and secure NQY's position as a place to grow aviation and aerospace business.

The Aviation Policy Framework sets out the Government's primary objective of achieving long-term economic growth. The aviation sector is recognised as a major contributor to the economy and that the Government stated that it would support growth in this sector within a framework which maintains a balance between the benefits of aviation and its costs, particularly its contribution to climate change and noise.

The Framework explains that one of the Government's main objectives was to ensure that the UK's air links continue to make it one of the best connected countries in the world. This includes increasing links to emerging markets so that the UK can compete successfully for economic growth opportunities. To achieve this objective, the framework states that it is essential both to maintain the UK's aviation hub capability and develop links from airports which provide point-to-point services and that this should be done in a balanced way.

A key priority of the APF is to work with the aviation industry and other stakeholders to make better use of existing runway capacity at all UK Airports including:

- Encouraging new routes and services
- Supporting airports in Northern Ireland, Scotland, Wales and across England
- Ensuring that airports are better integrated into the wider transport network
- In line with the APF, this Masterplan provides evidence and guidance to the Airport and prospective businesses to develop strategies to:
- Support growth and identify the benefits of aviation to the Airport
- Ensure climate-change impacts are considered
- Ensure noise and other environmental impacts are considered
- Work together with CC and the community
- Plan for future development

The Masterplan has explored the options available for the Airport to provide high quality facilities, including the potential of a new passenger terminal site and a business environment to meet modern aviation needs.

The Masterplan also identifies how the Airport can continue to help Cornwall's economy grow, through the connectivity of existing air services and the growth of new services, whilst continuing the development of the site for aerospace businesses through the promotion of the Enterprise Zone Aerohub and other Airport related business activities whilst acknowledging the environment and historic landscape in which it sits.

The principles of this Masterplan can also be considered as part of any planning applications required to further development outside of the LDOs and within the site boundary.


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Glossary of Terms

AGP	Aerospace Growth Partnership
AFSS	Airport Fire Services Station
APF	Aviation Policy Framework
ASAS	Airport Surface Access Strategy
ASR	Aerodrome Surveillance Radar
ATC	Air Traffic Control
ATF	Airport Transport Forum
ATM	Air Transport Movement
BAP	Biodiversity Action Plan
CAA	Civil Aviation Authority
CAGR	Compound Annual Growth Rate
CAL	Cornwall Airport Limited
CAP	Civil Aviation Publication
CC	Cornwall Council
C&IoS LEP	Cornwall and Isles of Scilly Local Enterprise Partnership
dB	Decibel
DfT	Department for Transport
DME	Distance Measuring Equipment
EA	Environmental Assessment
ERDF	European Regional Development Fund
ES	Environmental Statement
EZ	Enterprise Zone
FTEs	Full-Time Equivalent
GHG	Greenhouse Gas
Ha	Hectares
HAS	Hardened Aircraft Shelter
HEA	Historic Environmental Assessment
GA	General Aviation
GDP	Gross Domestic Product
GVA	Gross Value Added
IATA	International Air Transport Association
ILS	Instrument Landing System
LDO	Local Development Order
mppa	Millions of passengers per annum
MoD	Ministry of Defence
Mt CO^2	Million Tons of CO^2
NQY	Cornwall Airport Newquay
NDB	Non-Directional Beacon
NPPF	National Planning Policy Framework
PSO	Public Service Obligation
RAF	Royal Air Force
RDC	RDC Aviation Limited
SA	Sustainability Appraisal
SAR	Southern Access Road
SEA	Strategic Environmental Assessment
SSSI	Site of Specific Scientific Interest
SUDS	Sustainable Drainage Systems
SWMP	Surface Water Management Plan
SW RDA	South West Regional Development Agency
TA	Traffic Assessment
UK	United Kingdom
UAS	Unmanned Aerial Systems
VDF	Very High Frequency Direction Finder
VOR	Very High Frequency Omni-directional Range

HAS 7 NQY

Cornwall Airport Newquay

Masterplan 2015 - 2030

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