

BRIEFING PAPER

**A REVIEW OF CARDIFF AIRPORT'S PERFORMANCE
AND PROSPECTS IN THE CONTEXT OF CURRENT UK
REGIONAL AIRPORT ECONOMICS**



Prepared by



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Executive Summary

I This paper was commissioned by Cardiff International Airport Ltd (CIAL) from Northpoint Aviation, in order to provide independent expert evidence with which to:

- Apprise CIAL's Board and the Airport's shareholder about a number of matters relating to the Airport that have arisen in the public domain;
- address the ongoing close scrutiny of its performance (and its public ownership by the Welsh Government), by Welsh Assembly committees and members, and
- respond to the significant interest shown by other strategic stakeholders, including local MPs, the media and Welsh taxpayers.

II It will also help to inform CIAL's representations to the impending UK Government Regional Aviation Review and ongoing discussions between the Welsh Government and the Office of the Secretary of State for Wales, HM Treasury and DfT about the devolution of APD to Wales, route development from Cardiff and other initiatives which may contribute to maximising the connectivity and economic value of the Airport to Wales.

Introduction

III The paper provides an overview of Cardiff Airport's recent performance under CIAL and compares it with that under its previous owners *Abertis Infraestructuras, S.A*; it also benchmarks Cardiff relative to peer airports elsewhere in the UK over the last 10-15 years with a view to:

- Measuring Cardiff's outputs against both the best and worst in class;
- explaining the factors in Wales that impact significantly upon that analysis (e.g. catchment, traffic leakage and the ability to invest in the Airport's growth);
- assessing what the airport's future prospects are likely to be relative to its peers;
- examining the professional and academic literature's view of the public and private ownership model's and any hybrids thereof; and
- outlining the implications of the foregoing for future strategic decisions about investment in the airport and the airport's ownership.

IV The paper provides a wealth of data pertinent to answering these questions under the following headings:

- Historical Perspectives
- Recent Achievements
- Benchmarking Financial Performance
- Future Plans, Ambitions and Ownership

Historical Perspectives

V Analysis of historic trend data covering the period during which Cardiff Airport was managed by first Abertis and latterly CIAL on behalf of the Welsh Government after its

acquisition of the airport on 1st March 2013, indicates that CIAL is discharging its duties far more responsibly and effectively than its previous private owners did. Indicators to this effect include:

- A 60% turnaround in passenger growth since a significant low point in 2012;
- materially increased international traffic, including attracting the Airport's first scheduled long-haul carrier;
- evidence of some clawback market share from English airports (most notably Heathrow and Birmingham) that are benefitting from traffic originating in south and south west Wales leaking across the border, although further work is required to achieve similar success in respect of traffic displaced to Bristol and Gatwick;
- the Airport's freight business is beginning to grow again.

VI However, there is a view that the airport is being held back from achieving even more by a number of important structural factors, most notably a disproportionate regulatory cost burden which creates an unfair competitive environment in which smaller regional airports have a relatively low level of market power when compared to their larger peers and key airline customers and consequently struggle to access the commercial benefits that comes with economies of scale. This is, therefore, an important issue that CIAL and its shareholder, the Welsh Government, need to press the UK Government and industry regulators to address urgently.

Recent Achievements

VII This section of the paper examines trend data covering a combination of high-level financial indicators and consumer survey results; it also compares the economic impact of the Airport against similar data from peer airports in the UK.

VIII The trend analysis of the company's accounts points toward sound management of operating costs by CIAL because higher passenger throughput has been accommodated without a similar uplift in expenditure, while non-aeronautical revenue flows have been materially enhanced. The result is, that despite the need to make exceptional write-downs because of externalities such as the failure of Thomas Cook and the uncertainties associated with Flybe and Brexit, whilst concurrently having to increase allowances for depreciation and amortisation, CIAL has still reported an EBITDA surplus on its operating account.

IX There is also evidence of an increasingly positive response from passengers in the investments that have been made in upgrading a range of operational and commercial facilities at the airport, not only in terms of passenger volumes and expenditure, but also from results in Which? Magazine's annual airport consumer survey. The 2019 survey showed a marked uptick in the Airport's user ranking from 52% in 2013 coinciding with the transfer of the airport from Abertis to 64% in the most recent (2019) survey. Given the constraints imposed by the current infrastructure this is a very positive achievement.

X In the light of the foregoing, the provision of an additional loan from the Welsh Government appears to be a prudent measure that will allow continued investment in growth and income diversification.

XI Oxera's recent assessment of the economic impacts of Cardiff Airport, on behalf of the Welsh Government, points strongly towards it making progress in fulfilling its important role as an international gateway delivering enhanced connectivity to south and south west Wales, whilst also acting as an anchor for an emerging aviation and aerospace cluster in West Glamorgan. This evidenced by the fact Cardiff's economic outputs are already in-line with bigger peer airports elsewhere in the country and that is before the full potential of also having the nearby Bro Tathan under the same operational and ownership umbrella as part of a wider Enterprise Zone, is fully exploited.

Benchmarking Financial Performance

XII The benchmarking analysis provided in the paper, which encompasses both smaller and larger peers, suggests the Airport's financial performance is in line with what might be expected of a facility of Cardiff's size that lacks income from a sizable property portfolio to supplement its aeronautical and non-aeronautical income. Continuation of these encouraging results does depend heavily, however, on control of costs being maintained and further passenger growth being secured. Action on Air Passenger Duty, whether at a UK level by HM Treasury or in Wales if its devolution to the Welsh Government were to be supported, alongside the use of targeted PSO's to help enhance the Airport's domestic network and marketing support for new international routes, would certainly help to mitigate these risks.

Future Plans Ambitions and Ownership

XIII CIAL have recently developed a coherent and realistic Masterplan for the Airport covering the period out to 2040. This will provide a sound base for phasing and targeting future investment and encouraging collaborative ventures with external partners. Their approach to addressing the 'Climate Crisis' by setting out a commitment to systematically understanding, reducing and mitigating its CO2 emissions is both responsible, essential and well thought out. However, in the current environment when the impact of aviation on climate change is continuously in the news, urgent progress needs to be made to de-carbonise the airport's operations and effectively mitigate any residual emissions – including through verifiable offsetting, ideally in Wales if possible.

XIV Finally, we have provided an overview of airport transactions since the early 2000's, to provide re-assurance, that providing CIAL can continue to increase the airports throughput and profitability, the Welsh Government stands a realistic chance of securing an Enterprise Value from a future sale that should allow its loan finance to the Airport to be recouped and a surplus on its investment to be made. But the time for contemplating such a transaction, is at least 3 and realistically more like 5-10 years away. In the interim the Welsh Government will need to continue to offer loan support as it would be difficult for CIAL to raise such funding at the moment in the capital markets. Airports at a similar stage of

development elsewhere typically also rely on shareholder loans as external providers prefer lower risk propositions and seek asset-backed lending.

XV Given the foregoing and the lack of any coherent body of evidence from either the professional or academic literature that private airports out-perform equivalent publicly owned ones, especially when they are under 3mppa. Rather it appears to be the nature of the asset, the insight and aptness of the strategic and business planning and the quality of the management team that are critical. Given this, there is in our view no sound operational, commercial or financial reason for seeking to return the airport to private ownership, in whole or in part, in the near future. Instead, the aim should be to maintain positive but pro-active scrutiny of the current management team, in order to ensure its enthusiasm, professionalism and success in delivering positive progress at the Airport is maintained, and wherever possible, accelerated.

1. Introduction

- 1.1. In the face of ongoing scrutiny of its performance by the Welsh Assembly and external stakeholders, and with a Regional Aviation review by the UK Government now pending, Cardiff International Airport Ltd (CIAL) determined that it would be instructive if it were to develop a better understanding of how smaller regional airports in the UK and Europe are:
 - (a) Financed;
 - (b) structured in terms of ownership;
 - (c) perform commercially against key indicators;
 - (d) address regulatory and other disproportionate cost burdens;
 - (e) contribute to their local economies; and
 - (f) compare in terms of relative environmental impact vs larger airports.

- 1.2. In particular CIAL was interested to place its performance since it was acquired by the Welsh Government in the context of what was achieved by peer UK airports in the same period, and also under its previous Spanish owners – *Abertis Infraestructuras, S.A.*, with a view to:
 - i. offering a comparison against both best and worst in class performance,
 - ii. assessing what the airport's future prospects are likely to be relative to its peers
 - iii. explaining the factors in Wales that impact significantly upon that analysis,
 - iv. providing an articulation of the pros and cons of different ownership models and where the current structure supporting CIA falls within that spectrum, and
 - v. outlining the implications of the foregoing for future strategic decisions about the airport's ownership.

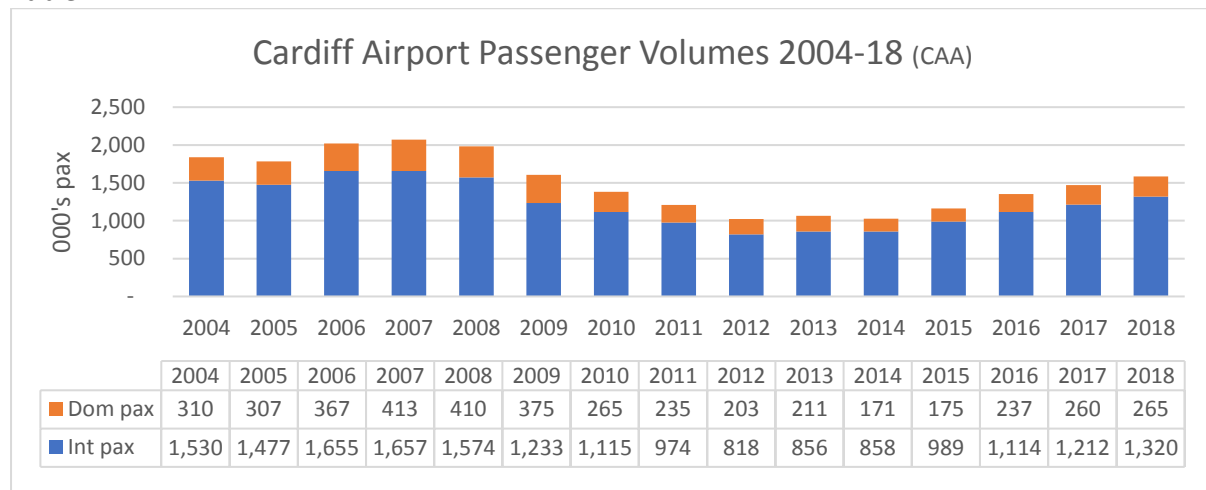
- 1.3. With those aims in mind, CIAL commissioned this briefing paper from Northpoint Aviation, who are a consultancy specialising in regional aviation and provide the Secretariat to the Regional and Business Aviation Group (RABA), of which CIAL is a member. The paper draws upon data and analysis from a wide range of sources and includes a review of relevant industry and academic literature which is referenced, where appropriate, in the accompanying footnotes. It also contains supporting appendices, which are cross-referenced at the appropriate point in the text.

- 1.4. The report presents Northpoint's findings as expert consultants with extensive experience and knowledge of the regional aviation sector and should not therefore be taken to represent the views of CIAL, the Welsh Government, RABA or other third parties.

2. Historical Perspectives

2.1. If we look back over the last 15 years (see Table 1), we can see that the point at which the Welsh Government acquired Cardiff Airport in early 2013 represented the nadir of a six-year decline in passenger volumes under the ownership of Abertis. From a peak of just over 2mppa, passenger throughput fell by 50%, to being at one point just slightly less than 1mppa on a monthly year-on-year rolling basis. While part of this decline can be attributed to the overall downturn the industry experienced after the financial crash of 2008, it is also notable that when other smaller UK regional airports began to see an upturn in their fortunes, Cardiff did not. Real improvement took until 2015 achieve, after two years during which CIAL, using loans from the Welsh Government, began to address the lack of investment and route development that the airport had suffered from in the hands of its previous private owner.

Table 1



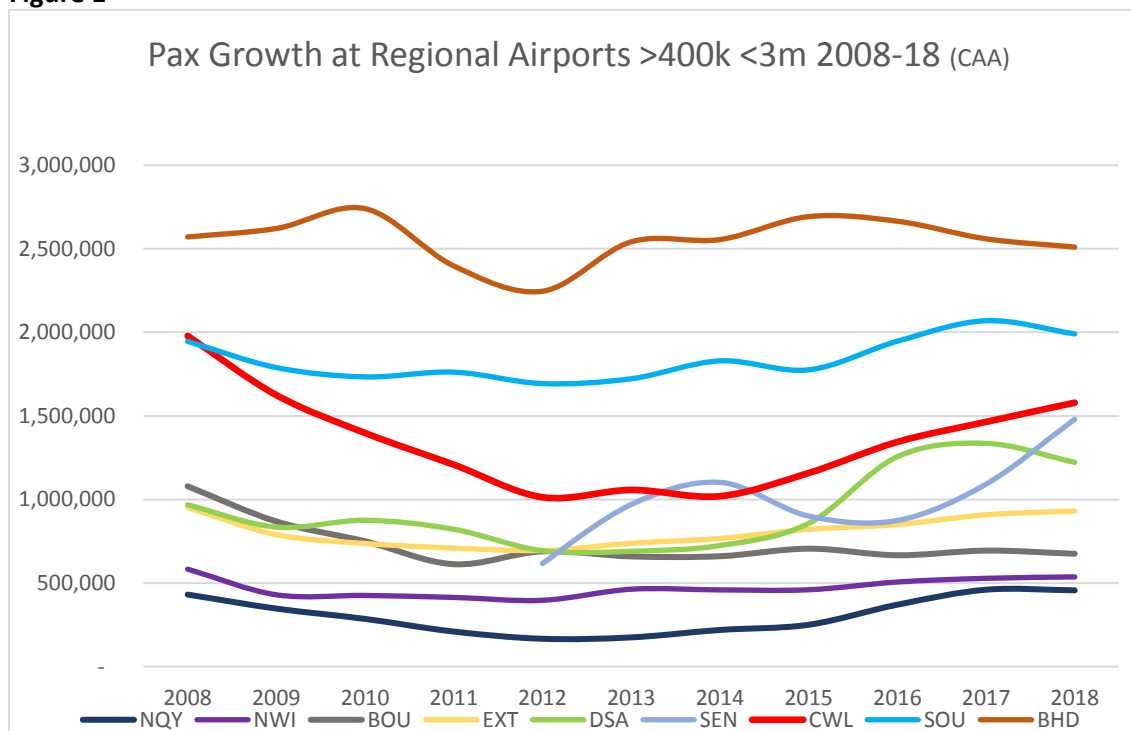
2.2. Table 2 charts that turnaround by comparing the trends on Cardiff Airport's passenger volumes between two key periods, the first 2008-12 when the airport was under Abertis' ownership, and 2012-18 during which it was in the Welsh Government's ownership, against a representative list of other smaller and medium sized regional airports in the UK. In the former period, Cardiff's traffic declined by 48%, ranking it third worst amongst the airports in the table. This compares poorly with the period between 2012-18, when traffic grew by 56% and Cardiff was the third best performer amongst the listed airports.

2.3. The upturn in Cardiff's fortunes is also shown clearly in Figure 1, where only Southend is able to match it, and the latter has benefitted from close to £175m worth of investment over that period and increasing capacity constraints at competing London airports creating particularly favourable conditions for growth.

Table 2 (see also Appendix A)

AIRPORT	Change in Pax (%) 2008-2012	Change in Pax (%) 2012-2018
BLK	-46.5	-91.8
DND	-10.3	-61.2
DTV/MME*	-74.5	-15.3
LDY	-9.3	-53.3
HUY	-45.0	-17.9
NQY	-61.4	174.6
NWI	-32.0	35.3
BOU	-36.1	-2.1
INV	-10.3	48.4
EXT	-26.9	34.0
DSA	-28.4	76.3
SEN	-	139.9
CWL	-48.8	55.8
SOU	-13.0	17.6
BHD	-12.6	11.8
LBA	3.8	36.0
LPL	-16.3	13.1
NCL	-13.2	22.4
BFS	-17.4	45.4
BRS	-5.0	47.0
Source:	Northpoint Aviation	
Notes:	Change of name with change of ownership in 2019	

Figure 1



- 2.4. The same story is replicated, first, when we look at the type of traffic which the airport is now attracting, with a strong emphasis on international short haul, and more recently with the start of the Qatar service to Doha, long haul traffic (see Table 3).

Table 3

Type of Traffic	2007	2012	2018	2019
Domestic	418,435	188,780	254,276	233,147
Short Haul	1,586,638	795,599	1,231,383	1,306,737
Long Haul	41,158	7,126	61,346	96,104
Other	52,882	25,506	36,051	21,450
Total	2,099,113	1,017,011	1,583,056	1,657,438

Source: CIAL data; Northpoint analysis

- 2.5. Second, when we see freight tonnages beginning to rise again having fallen by 70% in the period 2007-12 (see Table 4).

Table 4

Cardiff Airport - Annual Freight Tonnes				
Year	2007	2012	2018	2019
Freight (Tonnes)	2,423	1,050	1,461	1,820

Source: CIAL

- 2.6. And third, when we look at the increased share of its own indigenous market that Cardiff captured in the first 3Q's of 2019 vs 2015 (see Table 5 below and Appendix B) we can see that 30.24% of passengers originating or destined for south and south west Wales flew from CWL in 2019 against 26.68% in 2015, up 3.56%.

Table 5

Airport	Market Share in 2015	Market Share in 2019	Change in Market Share
Cardiff	26.68	30.24	3.56
Bristol	30.60	31.97	1.37
Heathrow	19.55	17.06	-2.49
Gatwick	8.96	9.53	0.57
Birmingham	6.38	3.79	-2.59
Stansted	3.02	2.82	-0.20
Manchester	3.00	2.67	-0.33
Other	1.81	1.92	0.11
Total	100%	100%	0.00

Source: CIAL data, Northpoint analysis

- 2.7. Traffic was clawed back to Cardiff mainly from Heathrow and Birmingham (reflecting the start of the Qatar service), but also to a lesser extent Stansted and Manchester. However, during the same period Bristol and Gatwick Airport's share of traffic originating in Wales also grew, emphasising the difficulty smaller airports have in challenging the market power of larger neighbours even over indigenous traffic from within their core catchment areas.
- 2.8. There is a view that this problem is under-pinned by structural factors, most notably the inability to access the benefits of economies of scale but also significantly disproportionate regulatory cost burden which creates an unfair competitive environment in which smaller regional airports have relatively low level of market power when compared to their larger peers and key airline customers.
- 2.9. As the aviation industry in the UK, as elsewhere, consolidates (Bmi Regional, Monarch and Thomas Cook have all departed the sector since 2018), the number of residual airlines and the range of aircraft they fly diminishes. This is making it more and more difficult for smaller regional airports, serving local and sub-regional markets, to attract new routes and additional frequency in competition against not just from regional rivals seeking to expand their reach beyond their core catchments (as in the case of Bristol's penetration of the South Wales air passenger market), but also with larger airports across the airline's network.
- 2.10. Smaller airports are, for example, typically unable to match the incentives (in the form of heavily discounted charges or marketing support packages), that larger airports can offer, and consequently their volumes and revenues become squeezed, whilst concurrently regulators continue to add impose more and more burdens on them without evidence of any real consideration of the competitive distortions and financial implications for smaller airports they are causing.
- 2.11. This commercial environment, also leaves the airlines that have suitable fleets with increased bargaining power, to the point where unlike in early noughties they have become price givers rather than price takers, a position that is reinforced by the knowledge that route 'churn' and the barriers to moving operations from one base to another (i.e. between airports) is relatively low. They are consequently often in an optimal position to maximise their utility by striking favourable deals on aero charges with little by the way of penalty clauses for walking away.
- 2.12. For smaller airports, this means their scope for raising aeronautical yields in the short-medium term is limited, whilst at the same time they can quickly become vulnerable to airline relocation and/or airline failure. In management terms this places focus on a combination of strong cost control, chasing growth from a wider and wider range of sources and diversifying income streams from non-aeronautical, property estates and other related business adventures to help sustain competitive route support packages in the form of discounted charges and local marketing support. CIAL are doing all of this, but like other smaller airports, is fighting an uphill

battle without help from the UK Government to level the regulatory and competitive playing fields.

- 2.13. If that is achieved, the long-term growth outlook for Cardiff Airport is positive, based solely on catering for its own indigenous Welsh traffic, provided CIAL continues to invest in and attract new routes, service frequency and seat capacity. And that is without any traffic that might be attracted from the South West region, especially to use long haul services for which Cardiff's longer runway and strategic catchment location (closer to much of south and south west Wales and further away from Heathrow than Bristol) is strategically better placed than Bristol or Birmingham Airports.
- 2.14. CIAL's primary commercial target, therefore, alongside lobbying for fairer treatment and a level playing field from the UK Government and industry regulators, needs to be clawing back more indigenous Welsh passengers to use their own local international airport, not those across the border. Like the other airports that have lost some market share, this would have very little impact on the larger English airports concerned. Indeed, there are already capacity problems at Heathrow and Gatwick and Bristol's long-term growth prospects are likely to be constrained as it moves towards its ultimate capacity limits of 10-12mppa.

3. Recent Achievements

3.1. The story of strong performance and material progress towards long term stability and commercial sustainability that has been a feature of CIAL's management of the Airport since the Welsh Government bought it, is continued if we look more closely at the airport's operational performance, which can be measured in terms of:

- (a) Financial performance
- (b) Passenger satisfaction
- (c) Economic outputs
- (d) Environmental emissions

Financial Performance

3.2. Although the next section of this paper looks at CIAL's financial position relative to its peers in greater detail, it is worth highlighting here three key measures where there has been a marked up-turn in Cardiff Airport's financial indicators since 2012.

Operating Cost Management

3.3. Overall costs have remained relatively constant (with only small increases) as volumes have increased, a strong indicator of operating efficiencies being achieved.

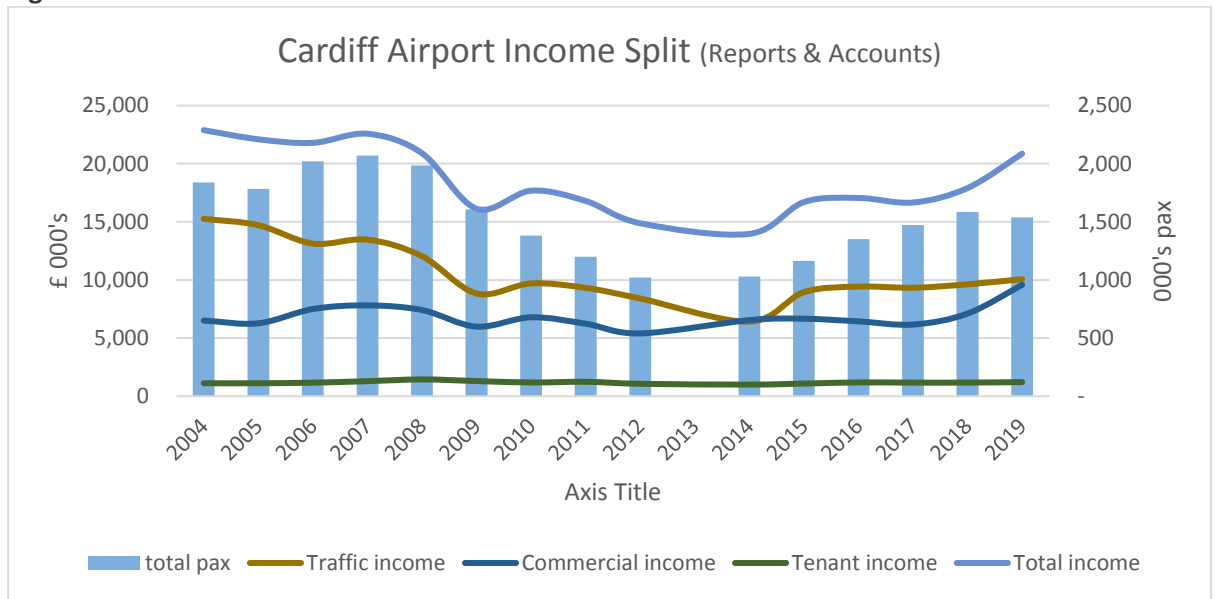
Revenue Generation

3.4. This has increased materially in recent years (see Figure 2), most notably as a consequence of investments in key areas of the airport operation such as:

- a more efficient security operation helping to maximise 'dwell' time in the airport's expanded departure lounge and retail, food and beverage offering,
- an enhanced car parking and car hire offer covering both the facilities but also the competitiveness of the pricing.

3.5. The 2018-19 airport accounts indicate these measures helped drive up turnover from £17.9m to £20.9m over the preceding 12 months and from less than £14m in 2013.

Figure 2



Source: Northpoint Analysis of CIAL accounts

EBITDA

3.6. EBITDA (which stands for earnings before interest, tax, depreciation and amortization and is a standard measure used globally to assess an airports overall financial performance) has been net positive in the last two financial reporting years after a period of significant losses (one of the reasons Abertis were willing to sell the airport to the Welsh Government) and increased by £70,000 in 2018-19.

Passenger Satisfaction

3.7. At the point when the Welsh Government acquired Cardiff Airport from Abertis in early 2013, the airport was ranked equal last in a league table of airports with fewer than four million passengers a year in that years Which? Consumer Survey of UK Airports¹. Cardiff scored a 52% satisfaction rating that year, joint last with Glasgow Prestwick, amongst smaller airports. It was even ranked worse than several larger airports, which typically perform much worse in the survey than smaller airports, as passengers prefer the convenience and ease of use of their local airports.

3.8. In the recent 2019 survey, however, Cardiff scored 64% - better now than all major airports (all of which are privately run) and 12th amongst smaller airports, a rise of 7 places. Whilst there is clearly further work to be done, and improving the passenger experience is crucial if Cardiff is to clawback more of the 70% of traffic that is leaking from South Wales to other UK airports, this is clear evidence of progress being made in response to the significant investment that CIAL has made in improving facilities.

¹ The Which? Survey is undertaken annually, and is one of the most reputable and important independent such assessments of the UK airport sector

3.9. This is exemplified well by the £4 million investment made in 2017/18 to both the terminal and the Airport's surrounding infrastructure, including:

- Additional seating in the departure lounge for passengers to relax before travelling, with stunning views of the runway
- The relocation and extension of the WH Smith store in the departure lounge. The store now offers many more products including a Well Pharmacy range
- Two new Costa Coffee branches, one in the Arrivals Hall and a larger café for passengers in the departure lounge, offering a selection of healthy snacks, hot food options, sweet treats and hot beverages
- A new look Executive Lounge and a new business lounge, renamed the 51° Lounge
- An upgrade to the hold baggage screening system to meet enhanced security requirements.

3.10. Improvements to Cardiff Airport's surrounding infrastructure included a brand new meet and greet facility for customers, an additional long stay car park (4) and the opening of a new car hire centre, which is located close to the main terminal and is a base for EuropCar, Enterprise, Hertz and Avis, to welcome visitors to Wales.

3.11. Current and future projects include:

- Installation of bag drop kiosks;
- Installation of automated check-in desks;
- Improvements to the central search security area, including a new tray return system;
- Installation of additional driveable airbridges to gates 7 & 9.

Economic Impacts

3.12. At the time the airport was acquired by the Welsh Government, wider economic considerations were a central plank of the business case made for the investment. This was supported by work undertaken by the Public Policy Institute for Wales in 2014/15. The significance of this factor in the strategic decision to purchase the airport has been emphasised again in a recent study by Oxera² which sought to evaluate the principle economic benefits arising from Cardiff Airport. These are set out in Table 6 overleaf:

² Oxera: The Economic Impact of Cardiff Airport, for the Welsh Government (Sept 2019)

Table 6

Cardiff Economic Impact			
GVA	£2,357,000,000	GVA per direct job	£42,546
Local GVA (South Wales)	£2,200,000,000	GVA per indirect job	£45,088
Direct GVA	£87,000,000		
Direct Jobs	2,000.00		
Indirect GVA	£159,000,000		
Indirect Jobs	3,500.00		
Catalytic footprint	£2,110,000,000		
Catalytic Jobs	46,800.00		

Source: Oxera Report (Sept 2019)

3.13. Summarising, Cardiff Airport had a total economic footprint of £2.4bn in 2018. The airport is responsible for sustaining approximately 2,400 jobs directly and indirectly in South Wales (5,500 jobs throughout the UK), with a catalytic footprint of 46,800 jobs, for a total footprint of 49,200 jobs in South Wales.

3.14. In terms of GVA, the airport's direct and indirect activity supports approximately £108m in the South Wales area with an additional £2.1bn from catalytic jobs.

3.15. Hence overall the economic impact of Cardiff Airport is estimated to have created 24,200 jobs in South Wales in 2018. The main local economic impact of Cardiff Airport is linked to the extent of catalytic employment (where firms locate around the airport because of the connectivity that it offers) which create an additional £1.0bn in GVA and an additional 22,900 jobs in South Wales. In terms of net effects, Cardiff Airport generates annual GVA of approximately £1.1bn in the South Wales area.

3.16. The scale of these outputs can then be compared with those generated by peer airports in Table 7 below and appear to stand-up well to comparison.

Table 7

Airport	Report date	Pax at time	Direct Jobs	Indirect Jobs	Direct GVA	Direct GVA per pax
Teesside	2012	139,549	594	160	£23,794,000.00	£170.51
Newquay	2015	250,278	370	1,160	£20,500,000.00	£81.91
Humberside	2008	424,402	725	320	£23,919,000.00	£56.36
Norwich	2017	528,153	1,240	360	£54,560,000.00	£103.30
Inverness	2018	892,971	748	N/A	£33,300,000.00	£37.29
Exeter	2008	951,265	1,450	700	£129,939,600.00	£136.60
Cardiff	2018	1,579,286	2,000	3,500	£87,000,000.00	£55.09
Southampton	2017	2,069,605	900	1,300	£71,488,000.00	£34.54
Belfast City	2012	2,246,202	960	N/A	£44,732,720.00	£19.91
Leeds Bradford	2015	3,445,291	2,350	N/A	£119,519,000.00	£34.69
Liverpool	2018	5,042,312	2,050	1,800	£105,000,000.00	£20.82
Bristol	2016	8,699,529	2,800	3,900	£300,000,000.00	£34.48
Luton	2015	16,581,000	9,400	7,700	£425,000,000.00	£25.63

Source: Northpoint research of published airport economic impact studies

3.17. Key things to note in the table are:

- Direct jobs and GVA growth for the most part increase with passenger numbers (the literature shows this as a linear trend and a side effect of the multiplier method), but with outliers usually occurring where there is significant non-passenger related airside activity which provide employment but do not add to passenger numbers such as MRO³. In Cardiff's case it is BAMC, at Exeter it is Flybe's Headquarters and maintenance base and in Norwich it is KLM's maintenance operation,
- There is a general rule of thumb to estimate direct employment at airports, namely that 1 job is created per 1000 passengers, however, this varies with the size and extent of development at each airport. So, for example the jobs to passenger ratio will actually be larger for small airports, because of the basic tasks that all airports need to undertake no matter what their size.
- Smaller airports will also show relatively large GVAs per passenger (e.g. £100) due to the scale of the fixed cost overhead required to run an airport. But direct GVA per passenger will reduce per passenger as a regional airport expands, due to scale efficiencies in employment.
- It is expected that GVA per passenger may start to eventually increase as an airports size and international routes expand, e.g. above 3m pax, and the airport is able to support ancillary services (bars, restaurants, high-end retail)

3.18. Summarising, the Oxera 2019 study found substantial economic benefits associated with Cardiff Airport, even at its current operating capacity. However, with an airport campus being planned on land owned by Legal and General between Port Road and the airport, Bro Tathan⁴ having been established only three miles away and Enterprise Zone status for both sites, the potential to create large economically significant employment cluster in the Vale of Glamorgan focused on the aviation, aerospace and related sectors is substantial. This new Gateway to Wales would then in turn provide a platform for innovation and wider economic benefits across Cardiff City Region by acting as focal points for sectoral clusters across South Wales, related agglomeration and spill-over benefits, new inward investment and a growth in overseas trade and tourism across Wales.

³ Maintenance, Repair and Overhaul

⁴ Bro Tathan is a large, new and strategically important 1200 acre business park in West Glamorgan with Enterprise Zone status and its own fully functional 1800m runway, on the site of what used to be RAF St Athan. It is located within 3 miles of Cardiff International Airport and 15 miles of Cardiff city centre. The site is divided into five zones:

- Y Porth - gateway to the site allocated for office, hotel, retail and show room uses;
- Bro Tathan North - storage, distribution and manufacturing;
- Bro Tathan West - Aviation and aerospace related activities requiring airside access;
- Bro Tathan East - 130 acres with capacity for 2m sq ft of inward investment;
- Bro Tathan South – Business and General Aviation uses.

Environmental Considerations

- 3.19. In 2019 UK & Welsh Government declared a climate Emergency and in May 2019 Welsh Government published Prosperity for All: A Low Carbon Wales, which sets out 100 policies and proposals to meet Carbon emissions targets. CIAL has recognised this challenge and are proactively considering how to reduce and mitigate the causes of climate change, whilst reviewing how to adapt and manage its impacts.
- 3.20. Over recent years CIAL have positively embraced various Environmental improvements to great success and their Environmental Flight Path (launched Oct 2019) publishes some of the steps already taken as well as some of the short-term objectives on their journey to Carbon Neutral estate.
- 3.21. CIAL have committed that in Summer 2020 they will announce their proposed date for Carbon Neutral airport estate. As such a study will be commissioned to undertake an analysis and impact report evaluating the existing estate as well as the Masterplan 2040 and will include assessment, advice and actions required to achieve a Carbon Neutral estate.
- 3.22. As well as looking at their own estate CIAL have acknowledged the challenge, and plan to continue to engage collaboratively with other stakeholders to better understand the opportunities and difficulties of carbon reduction associated with the aircraft using the airport and around surface access. It should for example undertake an assessment of the carbon emissions associated with flights from the airport, how they compare with surface alternatives and how they can be mitigated over time (e.g. through incentivising modern fuel efficient aircraft, making bio fuels available to airlines that wish to use it and making it attractive for electric aircraft to use Cardiff airport).
- 3.23. In relation to surface access, CIAL's Airport Surface Access Strategy will need to spell out how public transport links mode share can be increased and lower emissions vehicles (cars, taxi's, buses etc.) introduced at costs that do not put off users or make the airport uncompetitive. It will also need to throw light on the extent to which passengers from its own catchment can save emissions, money and time by using Cardiff to access a range of popular business and leisure destinations when compared with travelling long distances to use alternative airports in England, and hence demonstrate the value of flying from Wales' own airport.
- 3.24. Finally, significant investment will be required within the Airport Estate and by working with key airport partners (e.g. airlines, energy suppliers, surface access providers and major tenants like BAMC) to deliver a Carbon Neutral airport. CIAL will need to collaborate with other airports, through groups such as RABA and Sustainable Aviation, and its strategic stakeholders (e.g. local, city and regional government, adjacent landowners and the Welsh Government) to understand the opportunities and changes in technology that will help it to successfully deliver a de-

carbonisation programme. This points to an environmental agenda moving forward consisting of:

- understanding what is actually required;
- outlining a comprehensive carbon reduction plan with consideration given to carbon offsetting to “meet the gap” and develop a carbon offsetting plan;
- undertaking a systematic approach to reducing its carbon through the ACI accreditation scheme;
- examining opportunities to generate its own renewable energy and offset and residual carbon it is still unable to eliminate;
- work with airlines to understand their commitment objectives, provide airlines with a biofuel option, supporting their carbon reduction strategies under international treaties and in the case of domestic services, seeking to offer air services using aircraft configurations that will allow them to compete effectively with surface modes on key routes;
- Engage collaboratively with stakeholders to support improved integrated sustainable surface access options.

4. Benchmarking Financial Performance

- 4.1. This section of the report examines the financial performance of Cardiff Airport relative to peer airports, first as a means of evidencing whether CIAL is making progress (with Welsh Government support) in bringing the airport back to a commercial position commensurate with its size. But also, to demonstrate that as it continues to grow over the next 5-10 years, there is a real prospect of positive progress being made towards financial self-sufficiency, based on the benchmarking of larger UK regional airports.

Recent Financial Accounts

- 4.2. Despite returning a positive EBITDA for the second year running, CIAL's 2018-19 accounts state that:

"In light of the continuing volatility and uncertainty in the global economy and specifically the aviation industry including recent airline failures⁵, we have reviewed the life over which we measure our intangible assets and taken the prudent decision to write down the value of these assets. This has resulted in an exceptional charge of £9.3m which is reflected in our accounts for this financial year."

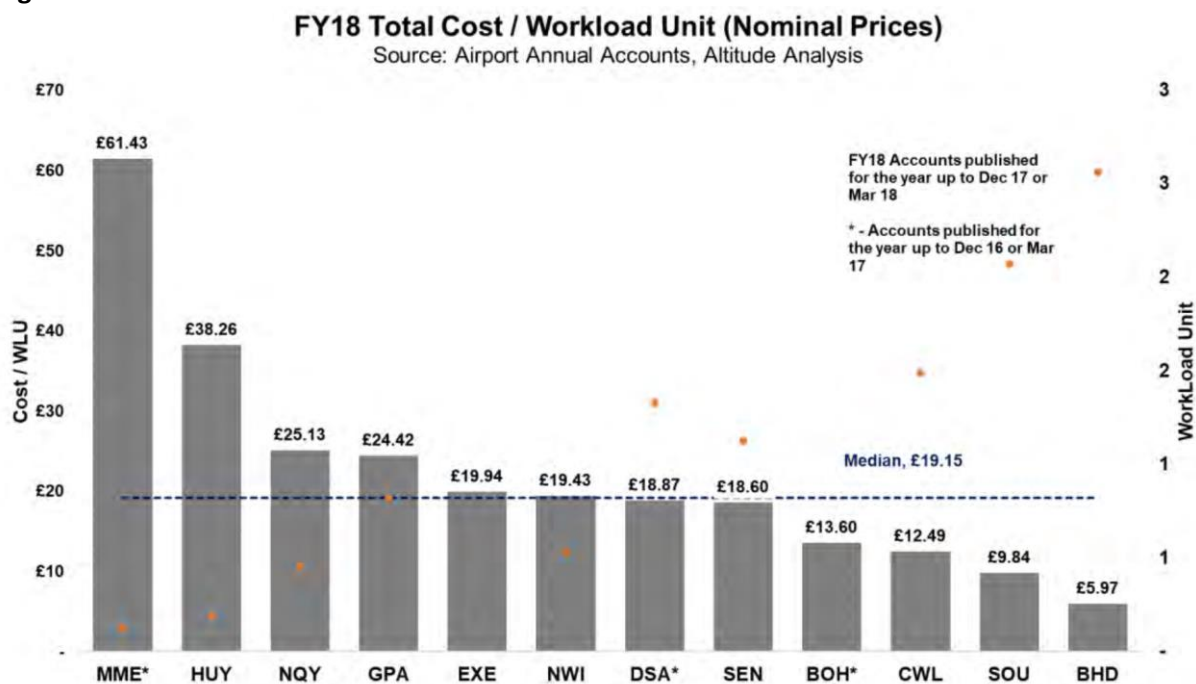
- 4.3. The exceptional item, in addition to increased amortisation and depreciation charges from recent increased investment, resulted in pre-tax losses being £18.5m in financial year 2018/19 against £6.6m in the prior year. With continued development and growth forecast, Cardiff Airport agreed additional borrowing of £28m with Welsh Government to drive improvements in infrastructure, routes, passenger volumes and revenues. Following this agreed increase in facility, CIAL will have access to total debt of £71m.

Benchmarking Financial Performance vs Peer Airports

- 4.4. In the benchmarking exercise which we have undertaken, Cardiff's financial position relative to eleven other peer smaller airports (i.e. less than 3mppa) and five medium sized airports (i.e. 3-8mppa), has been summarised in Table 8 (and later in Table 9), against a range of commonly used financial metrics based on 2017-18 and 2018-19 accounting data.
- 4.5. One of the most commonly used benchmarks of operating efficiency is operating costs/Workload Unit. This comparison, extracting data from Table 8 which follows, is provide in Figure 3 below.

⁵ Most notably in 2019 Thomas Cook (which had an aircraft based at Cardiff) and in 2018 Bmi Regional

Figure 3



Source: Data from Table 8

Notes: * MME is Teesside Airport, GPA Glasgow Prestwick and DSA Doncaster Sheffield Airports

4.6. What it shows is that CIAL’s costs of operation per WLU are below the median of the group and in line with what might be expected given its size (i.e. 1.6m pax vs over 2mppa at Southampton and Belfast City). It sits comfortably as one of the most cost-efficient airports in the group, and at the top end of the 8 best performing airports, all of which are privately owned.

Table 8

Airport	Airport Code	Pax	WLU	Revenue	Opex	EBITDA	Net Profit after Tax
Belfast City	BHD	2.6m	2.6m	£21.3m	£15.3m	£6.0m	(£0.5m)
Southampton	SOU	2.1m	2.1m	£31.3m	£20.4m	£10.9m	£6.9m
Cardiff	CWL	1.5m	1.5m	£18.6m	£18.6m	£0.0m	(£5.6m)
Doncaster Sheffield	DSA*	1.2m	1.3m	£10.6m	£25.1m	(£14.5m)	(£13.1m)
Southend	SEN	1.1m	1.1m	£21.2m	£20.9m	£0.2m	(£4.9m)
Exeter	EXE	0.9m	0.9m	£21.4m	£18.8m	£2.6m	£0.9m
Prestwick	PIK	0.7m	0.8m	£15.9m	£21.0m	(£5.2m)	(£6.2m)
Bournemouth	BOH*	0.7m	0.7m	£8.8m	£9.3m	(£0.5m)	(£1.6m)
Norwich	NWI	0.5m	0.5m	£14.0m	£10.3m	£3.7m	£1.5m
Newquay	NQY	0.5m	0.5m	£11.6m	£11.6m	(£0.0m)	(£0.0m)
Humberside	HUY	0.2m	0.2m	£8.1m	£7.8m	£0.3m	(£0.6m)
Durham Tees Valley	MME*	0.1m	0.1m	£5.4m	£7.7m	(£2.3m)	(£2.4m)

Source: Company accounts and Altitude Advisory and Northpoint analysis

Notes: * Refers to financial data for the year ending March 2017

WLU factors in freight traffic by assuming 1 tonne of freight is the equivalent in value of 10 passengers

- 4.7. If we turn to measures of profitability, it is the larger airports in the table (i.e. Southampton and Belfast City – which serve city catchments from short runways and consequently do not attract the level of low cost traffic seen at other airports and therefore leading to higher per WLU profitability than the other airports), and those with significant aviation property portfolios (e.g. Norwich and Exeter) that have a positive EBITDA⁶. Cardiff has fallen into this category⁷, even though BAMC (unlike KLM and Flybe’s MRO operations at NWI and EXE respectively), does not generate property rent for CIAL.
- 4.8. It is worth noting these airports are all privately (owned and run). In contrast, smaller airports such as Durham Tees Valley, Doncaster Sheffield, Prestwick and Bournemouth generate negative EBITDA. Some of this group of airports are privately run, their accumulated losses being covered by land and property sales (as at Sheffield and prospectively Bournemouth), while others are publicly owned and operated (see Appendix A). What is clear, however, is that there does not appear to be any correlation between the type of airport ownership that is in place and long-term financial performance. Rather, the potential for profitability appears far more to do with:
- the size and nature of the airport’s catchment (and Cardiff has a substantial one);
 - the extent of competition from other airports;
 - the price of the assets when acquired; and
 - the extent of the investment that needed to get them ready for growth.
- 4.9. When we turn to net profit after tax, only three airports (Exeter, Norwich and Southampton) generate positive returns and this group does not include Cardiff. This feature is driven by high fixed operating costs at smaller airports, outweighing their ability to generate revenue, which leads to negative EBITDA and negative net profit after tax. In the industry this is referred to as ‘disproportionate costs’ and this is a key area of market distortion that DfT have agreed to be put in the agenda looked at as part of their Regional Aviation review.
- 4.10. Moving next to look at the debt position of smaller and medium sized regional airports, we see that examples with higher throughput tend to have more debt because they need to provide, maintain and operate more capacity (i.e. they have a higher cost operation which in turn requires more borrowing for investment). However, they also generate more profit allowing bigger debt coverage/interest payments. The debt/revenue ratio is a measure of an airport’s ability to generate revenue relative to its level of debt and throughput.
- 4.11. Looking at the airports in Table 8:
- Southend debt is provided by shareholder loans. Note that Southend Airport has a very large level of shareholder provided debt due to major redevelopment of the airport in

⁶ Newquay’s accounts are balanced by an ongoing subsidy from their owners Cornwall Council

⁷ In the financial year concerned CIAL’s EBITDA was £7,000.

the last few years, including a new passenger terminal. This funding is highly unlikely to be available in the commercial debt market.

- Doncaster Sheffield and Durham Tees Valley debt is funded by shareholder loans from the Peel Group and the Teesside Combined Authority respectively.
- Exeter, Bournemouth and Norwich are funded by the Rigby Group shareholder.
- Durham Tees Valley and Doncaster are related to Peel Group (with minority local authority shareholding).
- Cardiff and Prestwick debt is provided by their respective Welsh and Scottish government owners.

4.12. Debt providers in the UK airport sector have tended to provide lending levels fluctuating in a range between 4x-8x debt/EBITDA levels, depending on the external financing environment and particular characteristics of the airport. This reflects the fact that there are nearly a dozen airports with larger throughputs than the benchmark airports, which have a lower perceived risk profile for debt providers due to the higher throughput levels and longer history of profitable performance.

4.13. Table 8 signifies that a number of the airports are in the 2x-5x debt/EBITDA range, with the two largest throughput airports in that table (Southampton and Belfast City) have relatively conservative debt/EBITDA ratio of 2.3x and 4.5x respectively. These airports, which have low levels of debt and positive EBITDA are likely to prove attractive to lenders, although it should be noted that both these airports have the risk of having over 80% of their capacity with one carrier, whereas CLW does not have any more than 30% of its seat capacity with one carrier.

4.14. Conversely, it also means, the other smaller benchmark airports have very high or negative debt/EBITDA ratios and will find it extremely difficult to attract commercial debt providers and/or at reasonable interest rates. As a result, many of the benchmark airports can only source debt through shareholder loans, as commercial debt would not be available for these marginal and/or loss-making airports. In the case of publicly owned airports, those shareholders are local or national Governments, because it is only that kind of institution that realistically will provide a source of investment to help secure the long-term growth that is required to make the airport financially sustainable. The Welsh Government is taking this role in relation to Cardiff.

4.15. The evidence from our analysis of the benchmark sample airports is that the ability to generate positive post-tax cash flows is very challenging for many of the benchmark airports, and that consequently the turnaround in CIAL's commercial performance is noteworthy. However, it also highlights that in the face of the disproportionate costs with which smaller airports are unfairly burdened, the biggest challenge faced by most smaller airports is to withstand declines in demand - a major concern for both debt and equity providers. This is why the business plans of many smaller airport's focus on mitigating this risk through pro-active route development and by developing a range of other diversified (non-aeronautical and property) income streams. Both of these strategies require investment and hence access to loans such as those provided to CIAL by the Welsh Government.

Benchmarking vs Larger Regional Airports

4.16. Table 9 provides some key metrics benchmarking Cardiff relative to some larger airports with passenger volumes of between 2.5-8.5mppa including Belfast City and Southampton again, but also Leeds Bradford, Liverpool, Newcastle and Bristol.

4.17. The results show that although these bigger airports generate substantially larger EBITDA than Cardiff, that is primarily a function of economies of scale, it does not necessarily mean they are operationally more efficient and better run than Cardiff is. Indeed, Cardiff has the lowest average costs per employee and is not alone (Southampton being the exception), in having borrowings to pay back; in Bristol's case the level of debt is significant. Moreover, each airport will almost certainly need to take on further debt if they are to continue to invest in growing their business and improving profitability.

Table 9

Financial Comparator	Cardiff	Belfast City	Leeds				Newcastle	Bristol
			Southampton	Bradford	Liverpool			
Passengers (mppa)	1,585	2,510	1,991	4,067	5,042	5,332	8,697	
Turnover ('000s)	£20,869	£22,086	£30,422	£33,961	£36,462	£59,880	£112,352	
Operating Costs ('000s)	£28,448	£18,835	£19,734	£32,741	£32,223	£26,053	£76,758	
Ops Cost/Employee ('000s)	£28.76	£44.97	£47.64	£43.65	£46.60	£49.87	£51.33	
Turnover/Pax	£13.2	£8.8	£15.3	£8.4	£7.2	£11.2	£12.9	
Ops Cost/Pax	£17.9	£7.5	£9.9	£8.1	£6.4	£4.9	£8.8	
P&L	-£18,526	-£166.0	£13,682.0	-£3,087.0	-£2,142.0	£22,575.0	-£26,768.0	
EBITDA ('000s)	£77	£9,457	£10,688	£11,957	£14,430	£59,161	£56,267	
EBITDA/pax	£0.05	£3.77	£5.37	£2.94	£2.86	£11.10	£6.47	
Debt	£65m	£102m	-	Unknown*	£60m	£80m	£673m	
Notes:	* Airport was bought for £220m and has plans to spend £135m on an expanded terminal.							
Source:	Company Accounts 2018/19							

4.18. The above notwithstanding, the significance of the scale of operation does become clearer when we look at indicators such as ops cost/pax, turnover/pax, and EBITDA/pax in Table 9. The first of these essentially declines with airport size, although there is a small step-up as a result of the increased complexity associated with Bristol's operation. Turnover/pax is more variable, with the only discernible explanation of the differences being greater competition from neighbouring airports and lower dependency on low cost operations (and therefore aeronautical revenues) at airports generating less than £10/pax. EBITDA/pax is also broadly size dependent, the exception being Bristol whose owners mortgaged substantial future earnings during a re-financing deal in 2018. The key to financial sustainability for Cardiff and other smaller airports is, therefore, to achieve a critical mass of throughput capable of generating levels of EBITDA that can cover operating costs (typically this occurs c 1 mppa⁸) and ultimately debt financing costs (c3-5mppa⁹).

⁸ Cranfield University: Study on Competition between Airports and the Application of State Aid Rules – Vol II Country Reports (Sept 2002)

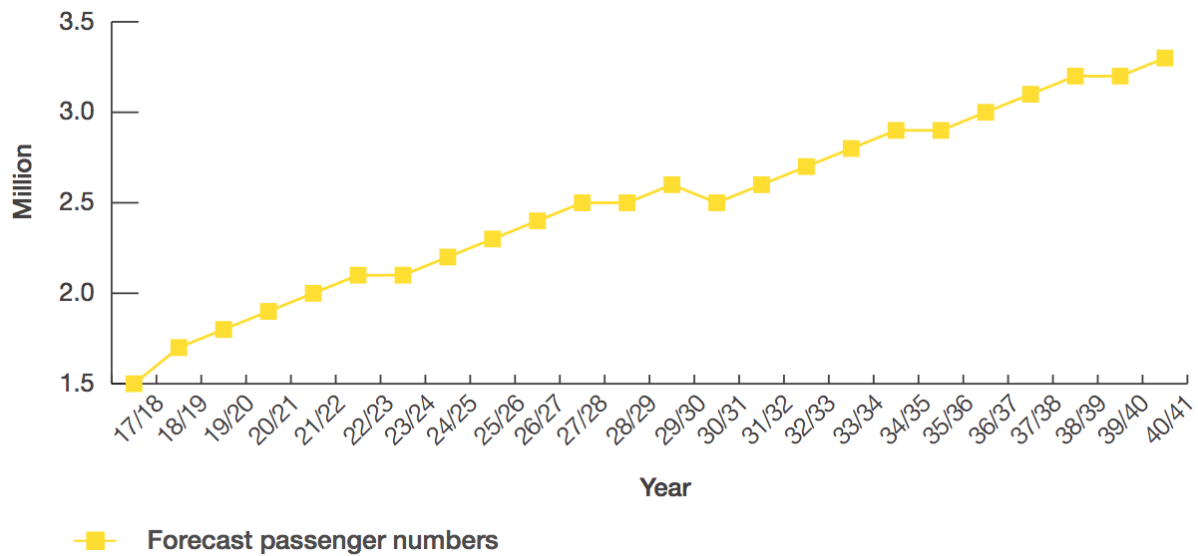
⁹ ACI EUROPE: Response to European Commission on its Communication on Draft EU Guidelines on State Aid to Airports and Airlines (Sept 2013)

5. Future Plans, Ambitions and Ownership

The Airport Masterplan

- 5.1. As an international gateway and strategic asset central to the national success story, Cardiff Airport plays a vital role in delivering connectivity, employment and wider economic value for Wales. With that in mind, the aim of the proposals CIAL have set out in their 2040 Masterplan is to:
- a. optimise use of the Airport site and its surroundings for aviation related purposes to the benefit of Cardiff City Region and Wales as a whole,
 - b. improve facilities and operations to provide passengers using the airport with an excellent user experience, and
 - c. working closely with strategic partners and adjacent landowners to invest in a shared vision for the wider Enterprise zone containing Cardiff Airport and Bro Tathan.
- 5.2. The core catchment area within Wales has a population of 2.4 million, with an outer catchment area in the South West of England containing a further 4 million. Passenger throughput, which had decreased under the stewardship of Abertis from a highpoint in 2007 to a low point of 1mppa in 2012, has started to grow again in response to the investment that has been made possible by the Welsh Government.
- 5.3. Over the last 25 years, UK airport passenger numbers have grown at an average of 4% per annum. Growth has tracked the UK's economic performance. This should provide confidence that the long-term forecasts underpinning the Masterplan for Cardiff Airport, which envisage an average annual growth rate of approximately 3%, look conservative and achievable (see Figure 4 below). This level of forecast growth shows that passenger numbers could reach 2.5 million in the next 10 years rising to 3.3 million by 2040.
- 5.4. The forecasts reflect long-term growth trends, supply side factors as well as wider national effects including London Heathrow's third runway (assumed in 2030), but most importantly, ongoing demand growth from Cardiff Airport's large catchment. This will provide increased passenger volumes in the future, but also offers the Airport the opportunity to capture a greater share of this indigenous Welsh demand through increased levels of service clawing back some of the traffic that is currently using other airports.
-

Figure 4



5.5. By achieving the levels of growth projected and acting as the nucleus for an important aviation industry cluster in South Wales, the Airport will be well placed to optimise the contribution that it can make to the economy of Wales. Expansion of both passenger and non-passenger activities at the Airport means that more jobs will be supported, both directly (in airside and landside functions) and within the broader aviation supply chain.

5.6. The landside airport campus trailed in the Masterplan, the establishment of an accompanying Enterprise Zone, the incorporation of St Athan airfield and the marketing of Bro Tathan and the Aerospace Business Parks are together helping to put in place the conditions required to attract and grow aviation and related businesses. Furthermore, airports and the connectivity they provide have a range of significant catalytic economic benefits as highlighted in Section 3 above. Connectivity by air is associated with higher productivity and GDP. Expanding the Airport's route network will help to foster trade, enable businesses to access markets further afield, and attract higher value inward investment, whilst also supporting Wales' important tourism industry.

5.7. The Airport's stated aims, therefore, seem both pragmatic and achievable:

- Deliver greater capacity to grow to three million passengers per annum and beyond
- Attract new airlines, secure new routes and more choice for customers travelling to and from the region
- Diversify the Airport business to create and develop opportunities for aviation, cargo, education, technology and innovation
- Build upon the Airport's efficient, safe and secure 24/7 operation.
- The needs of passengers are evolving and Cardiff Airport aspires to create a best-in-class international gateway to meet the needs of current and future generations. To achieve this, additional passenger stands and cargo facilities are

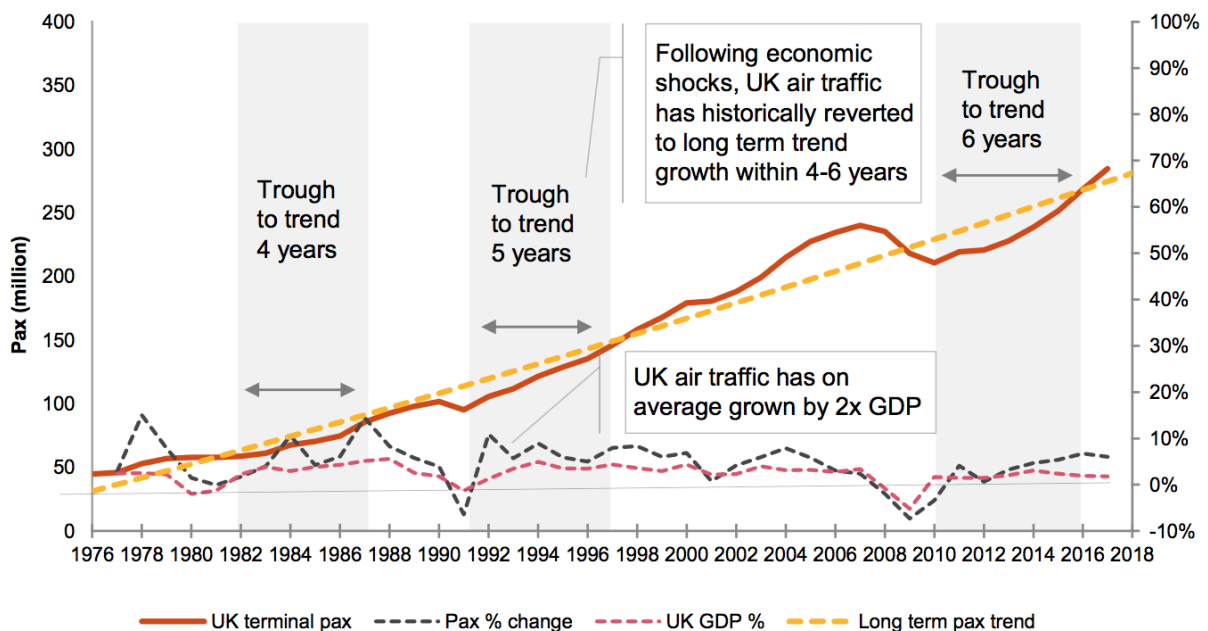
proposed. The increased capacity of the Airport will enhance its role as an international gateway to the UK.

Airport Enterprise Values

5.8. Over the last two decades, infrastructure assets have gained significant popularity and become a recognised asset class thanks to:

- their desirable investment characteristics (cash flows visibility, indexation to inflation, risk-adjusted returns, the scope for active management and secondary revenue streams such as property etc.)
- the fact that historically air traffic typically demonstrates a relatively high level of resilience, recovering from political, financial and other shocks in a fairly short period of time (i.e. 4-6 years) - as Figure 5 illustrates;
- the high operating margins airports enjoy because of a combination of high barriers to entry, limited competition and economies of scale (which in well-established and rapidly growing airports can typically achieve EBITDA margins in the region of 30% to 60% - this compares favourably to average EBITDA margins across other industries, which for European (including UK) listed companies average c.13%; and
- the current low-interest environment within which they offer an attractive level of risk-return to a wide range of investors.

Figure 5



Source: CAA, PwC Analysis

5.9. The Investor pyramid is constructed as follows:

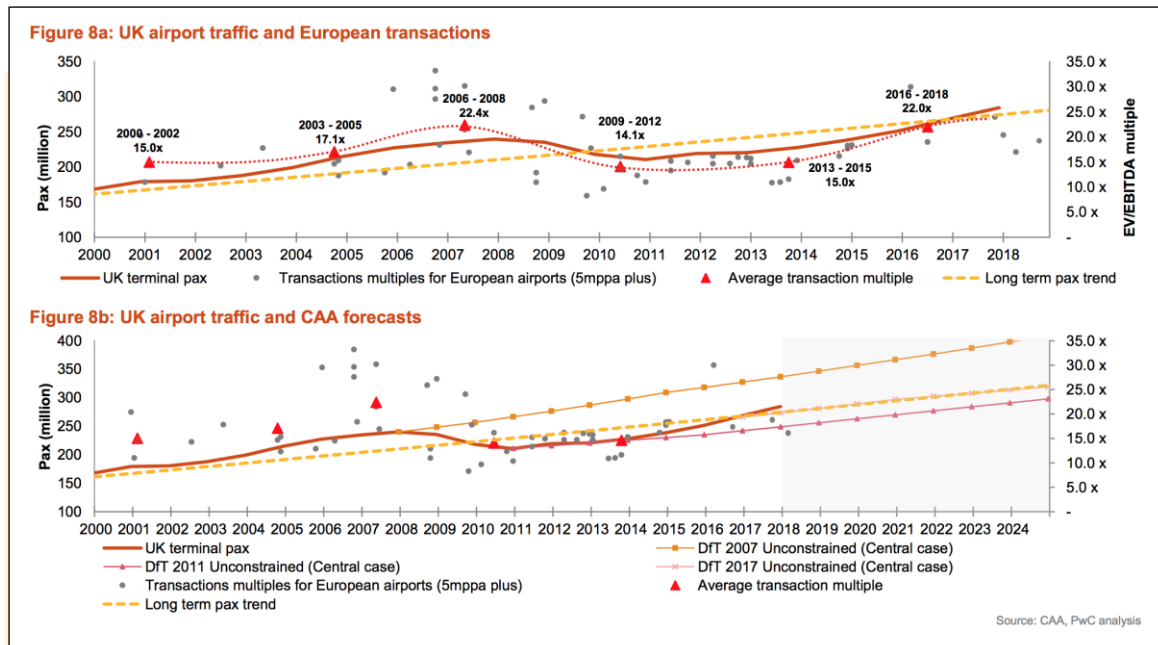
- Enterprise Value below £100m – property and transport companies (e.g. Peel Holdings and Stobart Group), other airport operators (e.g. Vinci, Ferrovial, MAG), small conglomerates (e.g. the Rigby Group) and city and national public authorities.

- Enterprise Value £100m-£500m: Specialist infrastructure funds (e.g., Macquarie Group, AMP, IMF and 3i) and generic investment funds (e.g. GIP, Ardian/Axa, Blackrock)
- Enterprise Value £500m- £1billion: Large investment banks (e.g. JP Morgan, Credit Suisse, Credit Agricole, BN Paribas) and public pension funds (e.g. Ontario Teachers, OMERS, University Superannuation Scheme)
- Over 1 Billion: Large sovereign wealth funds (e.g. Qatar Investment Fund, China Investment Corporation) or consortia of pension funds and large private investment funds.

5.10. Although at the top of the pyramid, investors are principally interested in hub or gateway airports with 25+ million passengers, which provide substantial yield-generating assets to help meet their long-term liabilities, lower down the pyramid there remain many active investors. PWC tracks airport transactions and publishes periodic updates about the state of the market, including EBITDA multipliers multiples as a guide to potential Enterprise Values (EVs) and IRRs that can be expected.

5.11. Historically airport EV's were reflected EBITDA multiples of as little as x6-8, but those days have long passed and even in a difficult financial climate or periods of shock for the aviation industry, multiples of x12-14 have been achieved. The latest data (see Box below) suggest transactions between 2016 and 2018, have closed valuation multiples averaging approximately 22 times enterprise value to earnings before tax, depreciation and amortisation (EV/EBITDA). These levels were last seen pre-global financial crisis and are significantly above the 15x average observed for transactions between 2013 and 2015¹⁰.

Box 1: Airport Transactions Multiples Since 2000



¹⁰ PWC (Feb 2017): Airport valuations have taken off – the question is where will they land?

5.12. This analysis suggests that in the event that the Airport Masterplan progresses successfully and Cardiff Airport continues to benefit from passenger growth and a continuous pattern of positive and growing EBITDA, the prospects for CIAL’s shareholders to both secure repayment of their loans and benefit from the creation of surplus Enterprise Value by selling some or all of their shares in CIAL in the medium or longer term, look good. The key to realising this outcome is strong cost management, a sound route development strategy supported by a coherent marketing strategy to raise awareness in the catchment of which destinations are served (and ideally reductions in APD and a supportive PSO network), a diversification of revenue streams and continuity of well targeted investment.

Ownership Models

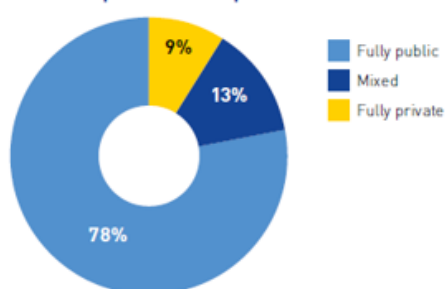
5.13. Since the 1980s, there has been a steady rise in the privatisation of airports, particularly larger ones in developed economies, owing to the fact that both governments and airports have looked to access private money to fund expansion rather than face competing pressures for resources in public spending rounds. Despite this, according to a recent Airport Council International World (ACI) report, only 14% of airports globally have some level of privatisation, but because many of them are larger aviation hubs, they account for around closer 40% of global traffic.

5.14. This pattern of creeping privatisation is also reflected in ACI’s Europe’s review of airport ownership from 2016, which noted that although there was growth in the full-private and mixed ownership models across Europe, fully publicly owned airports still represent the majority of Europe’s airports (see Figure 5).

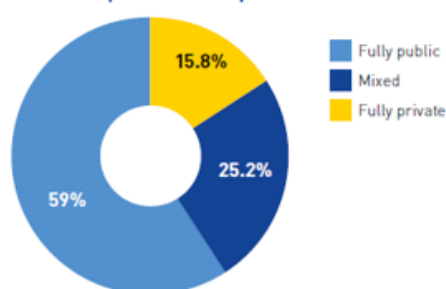
Figure 5

	Number of airports	Number of Fully Publicly Owned Airports	Number of Airports with Mixed Ownership	Number of Fully Privately Owned Airports
Total Europe	500	295	126	79
EU-28 airports	355	189	106	60
Non-EU airports	145	106	20	19

1. 2010 Airport Ownership



1. 2016 Airport Ownership



Source: ACI Europe

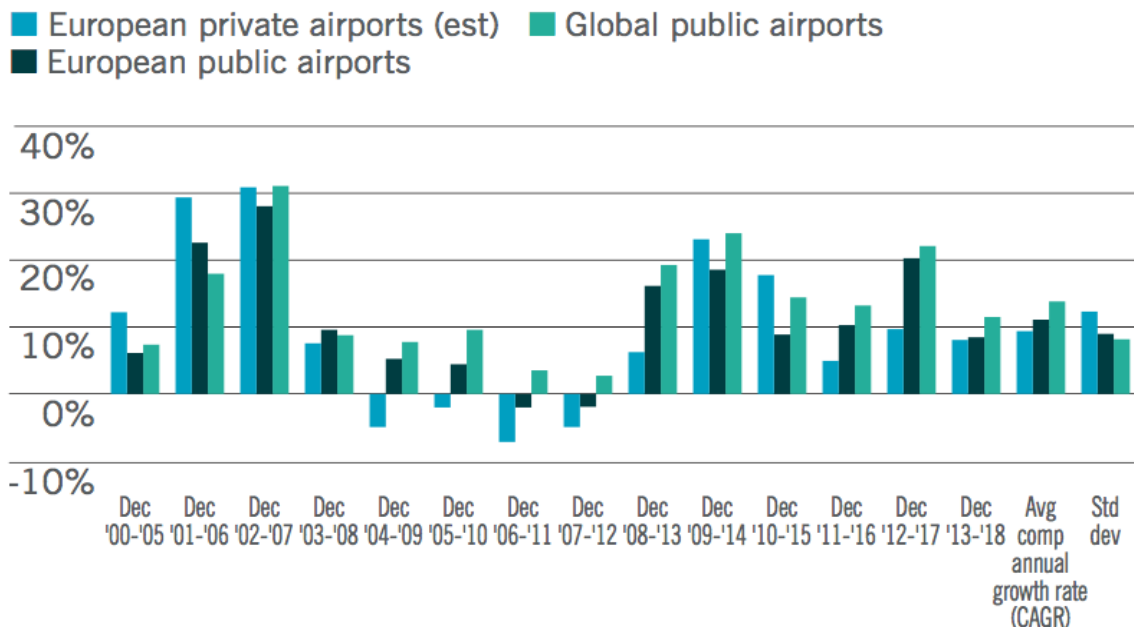
Privatisation vs Public Ownership – Which is Optimal?

5.15. There is no consensus in the academic and professional literature about which ownership model is optimal in securing technical operating efficiency and/or above average commercial performance for the particular size of airport concerned. Although a number of studies have championed privately managed airports, arguing that they tend to be more innovative in terms of commercial strategy and efficient in terms of operational performance than publicly owned and managed airports, others have identified negative effects, including:

- Failure to align private interests with strategic public sector and wider stakeholder aspirations
- Asset sweating – to avoid material investment in capacity or improving the passenger experience
- Cutbacks on airport infrastructure maintenance and repair spending
- Cannibalising operational areas to increase the size of commercial offer
- Higher prices for services (e.g. car parking, other surface transport modes and taxis)
- The tendency toward short-termism

5.16. It is notable that the two most substantive studies – by Lin and Hong (2006) and Oum et al. (2006) - find no clear connection between ownership form and airport efficiency. Public and majority (or fully) privatised airports appear to operate equally effectively as demonstrated in Figure 6, where in many cases public equity investments can be seen to outperform private companies.

Figure 6



Source: Nuveen¹¹

5.17. Moreover, even if privatisation were to be considered beneficial based solely on local airport specific considerations, it is also true that concerns to ensure the wider strategic role and value of major infrastructure facilities are undoubtedly more easily and seamlessly managed, when airports remain in public ownership or control. Cardiff's experience of its last private owner and Heathrow's difficulty in securing new capacity in order to compete with state-controlled Schiphol in Amsterdam, both highlight the influence of the broader strategic interests that are engaged in determining the future of an Airport's.

5.18. Privatisation, as the UK experience confirms, should not therefore be seen as a universal panacea for airports, because whilst the UK industry was one of the first countries to embrace private sector involvement at regional as well as major national airports (see Appendix C), it has also been one of the first countries to see airports being handed back to the public sector with the objective of turning their fortunes around.

5.19. Cardiff is perhaps the leading example of this, but others include Glasgow Prestwick, Blackpool and Durham Tees Valley, and Plymouth is waiting to join this list. Conversely, Newquay, Gloucestershire and a number of the HIAL airports (particularly Inverness and Sumburgh) are examples of airports that have managed to survive and develop in difficult markets under public ownership. At the other end of the spectrum Manchester, Luton, Luton, Birmingham, Newcastle and East Midlands are all examples of medium or large regional airports that have thrived in majority public ownership. All of which is grist to the mill of IATA's CEO and director general Alexandre de Juniac who recently urged governments to take a cautious approach to the further privatisation of airports, arguing that there has not yet been an example of privatisation that has delivered the promised benefits of greater efficiency for airlines, as well as a better experience for customers.

"Our members are very frustrated with the state of privatised airports," he said. "By all means, invite private sector expertise to bring commercial discipline and a customer service focus to airport management. But our view is that the ownership is best left in public hands."

5.20. The argument is that unlike the airline industry – where variety and competition between players drives down prices for consumers – airports can easily become monopolies and use their market power to imposing high prices on airlines and passengers alike. Hence:

"More effective regulatory pressure is required to prevent excessive profits by airports and return more value to consumers and the economy."

¹¹ Nuveen: Listed vs. private infrastructure - Why not both? (Dec 2019)

5.21. This viewpoint view has also been backed by other industry commentators: in March, Lufthansa CEO Casten Spohr said that privatisation of major airports in Europe was a “big mistake”, and that while investors may have a role in infrastructure, it should not be trying to optimise returns for pension funds.

5.22. Hence while it is not yet clear whether the Welsh Government’s efforts to turn Cardiff into the thriving alternative UK gateway set out in the airport’s Masterplan will come to fruition, there is plenty of evidence supporting the notion that because the public sector can take a longer view of returns on investment than most private sector owners, its current ownership model may not only be pragmatic but also ideally suits the airport’s current stage of development. It is also very unlikely to be the determining factor in achieving CIAL’s vision for the airport and the the Welsh Government’s ambitions for the wider Enterprise zone it anchors.

Horses for Courses?

5.23. A 2006 study¹² of 160 airports (some 25 of which were European) came to the conclusion that that while smaller/less profitable regional airports will continue to see high levels of public sector involvement in their ownership, public-private arrangements are increasingly common in the developed world, especially for larger more mature airports and that consequently larger/private airport operations tend to be more profitable than the public ones. What is less clear is whether the better financial performance is because of ownership or airport size/market maturity – here too, the literature remains unclear on this issue.

5.24. Changing airline strategies and the concentration of traffic at larger regional and London airports may slowly be beginning to have adverse effects on the future prospects for the UK’s smaller and more peripheral regional airports, of which Cardiff must be considered one.

5.25. Larger airports (serving 3-5m and more passengers) are seeking to recover and grow the traffic they lost in the economic downturn at the beginning of the decade, and in some cases to expand their reach with long-haul as well as short haul services to overseas hubs. In this regard, Cardiff because of its Qatar service is already outperforming its larger peers. However, smaller airports in the UK (especially those serving less than 1 mppa) are in a precarious situation, because if travel demand stagnates again as a result of Brexit, they are likely to experience:

- significant downward pressure on aeronautical revenues;
- while low traffic volumes will affect their ability to generate commercial revenues; and
- their high fixed costs are not so affected by changes in traffic volume anyway.

¹² Ouma Tae.H., Adlerb Nicole and Yua Chiunyan “Privatization, corporatization, ownership forms and their effects on the performance of the world’s major airports”, Journal of Air Transport Management, 12, p. 109-121, 2006

- 5.26. Some of them appear likely to be inherently loss making and in addition to seeking to develop air services, may need to diversify their business in order to survive (e.g. by using airport land for maintenance facilities or commercial non-aviation purposes).
- 5.27. These structural issues for smaller regional airports, were first identified in a report prepared by Cranfield University in 2002 on behalf of the EU, which concluded that smaller airports with a throughput of less than 500,000 WLUs were unlikely to generate sufficient revenue to cover their operating costs. Then in 2015, a consultation on State Aid Guidance relating to regional airports, noted that actually most airports with fewer than 1 million passengers per annum would typically struggle to cover their operating costs.
- 5.28. Despite this, the Commission's approach to this generic problem – which they see as a challenge to the operation of a competitive single airport markets, is to set a deadline of 2024 (ten years after the Guidelines were first published) to eliminate operating aid. ACI argued at the time¹³ that a 10-year transitional period would not resolve the issue, but it remains current EU policy; and even with Brexit the UK is still committed to remaining aligned with EU policy in airport competition, putting into context the position the jeopardy which Abertis' ownership of the airport was creating before Welsh Government intervention.
- 5.29. The Welsh Government's intervention has addressed this immediate peril, but to reach the comparative safety of +3mppa there will still be need for significant further public investment in Cardiff Airport. Most of this will continue to be in the form of commercial loans from its single shareholder, but the updated State Aid Guidelines on regional airports also do not preclude in appropriate circumstances limited investment aid, with no requirement to repay, provided it is below 25% intensity.

¹³ ACI Europe (2016): Airports and State Aid – How to Protect Both Growth and Competition

6. Conclusions

6.1. This paper provides a wealth of evidence that supports the notion that CIAL, the operating company appointed to manage Cardiff Airport after its acquisition from previous owners Abertis, is discharging its duties responsibly and effectively having:

- Brought about a 60% turnaround in passenger growth since a significant low point in 2012;
- Increased international traffic materially, including attracting its first scheduled long-haul carrier;
- Begun to clawback market share from English airports that are benefitting from traffic originating in south and south west Wales leaking across the border;
- Started to grow the airport's freight business again.

6.2. There has been a positive uptick in the Airport's ranking in Which? Magazine's annual airport survey, whilst the trends in the company's accounts point to sound management of operating costs whilst accommodating higher passenger throughput. Non-aeronautical revenue flows have also been materially enhanced. The result is, that despite the need to make exceptional write-downs due to externalities like Thomas Cook going into administration and uncertainties associated with Flybe and Brexit, and the need to make increased allowances for depreciation and amortisation, CIAL has still reported an EBITDA surplus on its operating account. Given this, the additional loan recently provided by the Welsh Government, appears to have been a prudent measure which will allow continued investment in growth and income diversification.

6.3. Based on a benchmarking analysis that we have also provided, this financial performance is in line with what might be expected of an airport of its size, without access to income from a sizable airport property portfolio or the balance sheet of a larger airport group to fall back on. Its continuation does, however, depend heavily on maintaining continuous cost controls and securing further passenger growth. Action from Government in relation to APD, whether at a UK level or by allowing it to be devolved to the Welsh Government, the use of PSO's to enhance the Airport's domestic network and marketing support to attract services to target international destinations, would certainly help to mitigate these risks.

6.4. Oxera's assessment of the economic impacts of Cardiff Airport point strongly towards it fulfilling its important role as Wales' primary indigenous international gateway, delivering enhanced connectivity and acting as an anchor for an emerging aviation and aerospace cluster in West Glamorgan and more broadly across South Wales. Cardiff's economic outputs are actually in line with those of bigger peer airports elsewhere in the country.

6.5. CIAL have also developed a coherent and realistic Masterplan out to 2040 which will provide a sound base for future investment and partnership working and their approach to addressing the 'Climate Crisis' by making a commitment to

systematically understanding, reducing and mitigating its CO2 emissions is both responsible, well thought out and urgently needed.

- 6.6. Finally, we have provided an overview of airport transactions going back to the early 2000's, to provide re-assurance that providing CIAL can continue to increase the airport's throughput and profitability, the Welsh Government stands a realistic chance of securing an Enterprise Value from a future sale that should allow its loan finance to be recouped and a surplus on its investment to be made. But the time for contemplating such a transaction, is at least 3 and realistically 5-10 years away; in the interim the Welsh Government will need to continue to offer loan support as it would be difficult for CIAL to raise such funding at the moment in the capital markets.
- 6.7. Given the foregoing and the lack of any coherent body of evidence that private airports perform better the publicly owned ones, especially when they are under 3mppa, there is in our view no sound operational, commercial or financial reason for seeking to return the airport to private ownership, in whole or in part. Rather the aim should be to maintain positive but pro-active scrutiny of the current management team, in order to ensure their enthusiasm, professionalism and success in delivering positive progress at the Airport is maintained and if possible, accelerated.

Appendices

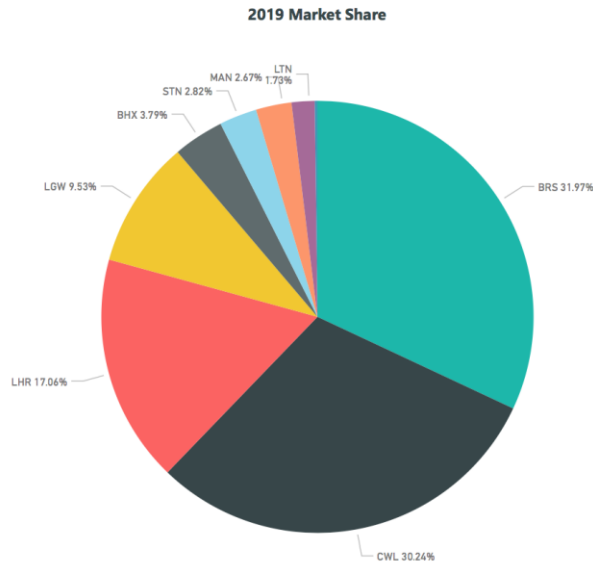
Appendix A

Airport Code	Airport Name	Ownership	Airport Size (Pax per annum)
BLK	Blackpool	Public - Local Authority	0-500,000 pax
DND	Dundee	Public - Scottish Government	
DTV/MME	Durham Tees Valley/Teesside*	Public - Local Authority	
LDY	City of Derry	Public - Local Authority	
HUY	Humberside	Private	
NQY	Cornwall Airport Newquay	Public - Local Authority	
NWI	Norwich	Private	500,000 - 1m
BOU	Bournemouth	Private	
INV	Inverness	Public - Scottish Government	
EXT	Exeter	Private	1m - 2m
DSA	Doncaster Sheffield Airport	Private	
SEN	Southen	Private	
CWL	Cardiff	Public - Welsh Government	
SOU	Southampton	Private	
BHD	Belfast City	Private	2m - 3m
LBA	Leeds Bradford	Private	3m - 5m
LPL	Liverpool	Private	
NCL	Newcastle	Public - Local authority	
BFS	Belfast International	Private	
BRS	Bristol	Private	5m+
Source:	Northpoint Aviation		
Notes:	Change of name with change of ownership in 2019		

Appendix B

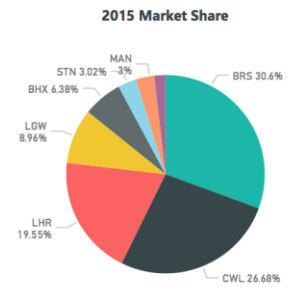
South Wales Passenger Market Share

- 3.96 million South Wales passenger have flown from the following airports in the period January - September
First 9 months of 2019. 30.24% have flown from CWL.



Total Market
3,961,879

Cardiff Passengers
1,199,884



Source: CAA Regional Survey 2019 Q1-Q3

Appendix C

Ownership	Relevant asset	Ownership	Relevant asset
Private Limited	Aberdeen Airport	Publicly owned	Barra Airport
Private Limited	Belfast International Airport	Publicly owned	Benbecula Airport
Private Limited	Blackpool Airport	Publicly owned*	Birmingham International Airport
Private Limited	Bournemouth Airport	Publicly owned	Bournemouth Airport
Private Limited	Bristol International Airport	Publicly owned	Brighton City Airport
Private Limited	Edinburgh Airport	Publicly owned	Campbeltown Airport
Private Limited	Exeter International Airport	Publicly owned	City of Derry Airport
Private Limited	Gatwick Airport	Publicly owned	Dundee Airport
Private Limited	George Best Belfast City Airport	Publicly owned	Newcastle International Airport
Private Limited	Glasgow Airport	Publicly owned	Gloucestershire Airport
Private Limited	Heathrow Airport	Publicly owned	Inverness Airport
Private Limited	Humberside Airport	Publicly owned	Islay Airport
Private Limited	Land's End Airport	Publicly owned	Kirkwall Airport
Private Limited	Leeds Bradford International Airport	Publicly owned	London Luton Airport
Private Limited	Liverpool John Lennon Airport	Publicly owned	Manchester Airport
Private Limited	London City Airport	Publicly owned	Newquay Cornwall Airport
Private Limited	London Southend Airport	Publicly owned	St. Mary's Airport (Isles of Scilly)
Private Limited	Nottingham East Midlands Airport	Publicly owned	Stornoway Airport
Private Limited	Norwich International Airport	Publicly owned	Sumburgh Airport
Private Limited	Robin Hood Doncaster Sheffield Airport	Publicly owned	Tingwall Airport
Private Limited	Southampton Airport	Publicly owned	Tiree Airport
Private Limited	Stansted Airport	Publicly owned	Wick Airport
Change of Status in Last Decade			
Privately owned	Glasgow Prestwick Airport ⇌	Publicly owned	Glasgow Prestwick Airport
Privately owned	Cardiff Airport ⇌	Publicly owned	Cardiff Airport
Privately owned	Blackpool Airport ⇌	Publicly owned	Blackpool Airport
Privately owned	Durham Tees Valley Airport ⇌	Publicly owned	Teesside Airport
Privately owned	Manston ⇌	Closed but DCO for re-opening awaiting decision	
Privately owned	Filton ⇌	Closed and now housing development	
Privately owned	Plymouth ⇌	Closed but lease reverted to PCC and under review	
Privately Owned	Penzance Heliport ⇌	Closed and now a retail development	
Privately owned	Coventry ⇌	Closed to scheduled passenger aviation	

* AIRPORT EMPLOYEE TRUST OWNS BALANCE OF SHARES

Appendix D

Type of Ownership by Country EU-28 – ACI 2016

