

Agenda – Public Accounts Committee

Meeting Venue:

Committee Room 2 – Senedd

Meeting date: 26 February 2018

Meeting time: 14.15

For further information contact:

Fay Bowen

Committee Clerk

0300 200 6565

SeneddPAC@assembly.wales

(The Committee agreed on 12 February 2018, a motion under Standing Order 17.42 to resolve to exclude the public from Item 1 of this meeting)

1 Medicines Management: Consideration of draft Report

(14.15 – 14.45)

(Pages 1 – 57)

PAC(5)–06–18 Paper 1 – Draft Report

(Pre-meeting)

(14.45 – 15.00)

2 Introductions, apologies, substitutions and declarations of interest

(15.00)

3 Paper(s) to note

(15.00 – 15.10)

(Pages 58 – 60)

3.1 Intra-Wales – Cardiff to Anglesey – Air Service: Correspondence from the Cabinet Secretary for Economy and Transport (30 January 2018)

(Pages 61 – 193)

3.2 Cardiff Airport: Correspondence from the Welsh Government (2 February 2018)

(Pages 194 – 195)



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- 3.3 Introductory Session: Correspondence from the Welsh Government (31 January 2018)**
(Pages 196 – 201)
- 3.4 The Welsh Government's Supporting People Programme: Correspondence from the Welsh Government (8 February 2018)**
(Pages 202 – 206)
- 3.5 Committee working practices and procedures: Correspondence between the Committee and the Welsh Government**
(Pages 207 – 210)
- 4 Care experienced children and young people: Evidence session 6**
(15.10 – 16.30) (Pages 211 – 238)
Research Briefing
PAC(5)-06-18 Paper 2 – Consultation response from the Welsh Local Government Association (WLGA)

Cllr Huw David – WLGA Spokesperson for Health and Social Services (and Leader of Bridgend County Borough Council)
Cllr Geraint Hopkins, WLGA Deputy Spokesperson for Health and Social Services (and Cabinet Member in Rhondda Cynon Taf County Borough Council)
Stewart Blythe, WLGA Policy Officer (Health and Social Care)
- 5 Motion under Standing Order 17.42 to resolve to exclude the public from the meeting for the following business:**
(16.30)
Item 6
- 6 Care experienced children and young people: Consideration of evidence received**
(16.30 – 17.00)

Document is Restricted

Agenda Item 3

Concise Minutes – Public Accounts Committee

Meeting Venue:

Committee Room 3 – Senedd

Meeting date: Monday, 12 February 2018

Meeting time: 14.02 – 17.08

This meeting can be viewed
on [Senedd TV](#) at:

<http://senedd.tv/en/4507>

Attendance

Category	Names
Assembly Members:	Nick Ramsay AM (Chair) Mohammad Asghar (Oscar) AM Neil Hamilton AM Adam Price AM Lee Waters AM
Witnesses:	Harri Colman, Fabric Christopher Dunn, Voices from Care Cymru Deborah Jones, Voices from Care Kate Lawson, The Fostering Network Sean O'Neill, Children in Wales Colin Turner, The Fostering Network
Wales Audit Office:	Anthony Barrett – Assistant Auditor General for Wales Matthew Mortlock
Committee Staff:	Anthony Barrett Matthew Mortlock Meriel Singleton (Second Clerk)



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	Claire Griffiths (Deputy Clerk)
	Sian Thomas (Researcher)

1 Care experienced children and young people: Meeting with children and young people

1.1 The Members met informally with the young people prior to the evidence sessions.

2 Introductions, apologies, substitutions and declarations of interest

2.1 The Chair welcomed the Members to Committee.

2.2 Apologies were received from Vikki Howells AM and Rhianon Passmore AM. There were no apologies.

2.3 Following a request from the young people giving evidence in Items 4 and 5, the Chair agreed to hold those sessions in private.

3 Paper(s) to note

3.1 The papers were noted.

4 Care experienced children and young people: Evidence Session 3

4.1 Members received evidence from young people from Voices from Care as part of their inquiry into care experienced children and young people.

5 Care experienced children and young people: Evidence Session 4

5.1 Members received evidence from young people from Harri Coleman together with young people from Voices from Care as part of their inquiry into care experienced children and young people.

6 Care experienced children and young people: Evidence Session 5

6.1 Members received evidence from Kate Lawson and Colin Turner from the Fostering Network as part of their inquiry into care experienced children and young people.

6.2 Kate Lawson agreed to send examples of best practice of measuring the impact of fostering from her experience in England.

6.3 Colin Turner agreed to send details of future sessions of the project 'Ten top key principles of social pedagogy'.

7 Motion under Standing Order 17.42 to resolve to exclude the public from the meeting for the following business:

7.1 The motion was agreed.

8 Care experienced children and young people: Consideration of evidence received

8.1 Members considered the evidence received.

9 Work programme: Consideration of correspondence received

9.1 Members noted the letter and that the Culture, Welsh Language and Communications Committee had agreed to undertake an inquiry into film and television production which will incorporate looking at transparency and grant funding.

9.2 Members confirmed that they would be keen to see a facts only review completed looking specifically at the investment in Pinewood, which they felt would be of interest to the Public Accounts Committee and/or the CWLC Committee.

10 Ofcom: Consideration of draft Memorandum of Understanding

10.1 Members considered and noted the draft Memorandum of Understanding. It was suggested that consideration be given to holding pre-appointment hearings by the relevant Committee and that this be reflected in the response to the Welsh Government.



Llywodraeth Cymru
Welsh Government

Ein cyf/Our ref MA – P/KS/0111/18

Nick Ramsay AM
Chair
Public Accounts Committee

30th January 2018

Dear

Nick,

Further to the last update received by the Committee about the review of the PSO air service on 23 September 2016, I am pleased to confirm the review has been published on the Welsh Government website.

Please see link: <https://beta.gov.wales/review-options-air-service-between-north-and-south-wales>

*Yours ever,
Ken*

Ken Skates AC/AM

Ysgrifennydd y Cabinet dros yr Economi a Thrafnidiaeth
Cabinet Secretary for Economy and Transport

Bae Caerdydd • Cardiff Bay
Caerdydd • Cardiff
CF99 1NA

Canolfan Cyswllt Cyntaf / First Point of Contact Centre:
0300 0604400
Gohebiaeth.Ken.Skates@llyw.cymru
Correspondence.Ken.Skates@gov.wales

Rydym yn croesawu derbyn gohebiaeth yn Gymraeg. Byddwn yn ateb gohebiaeth a dderbynnir yn Gymraeg yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding.

Review of the PSO – Long Term Future

Summary Report



Supported by Northpoint Aviation Services



Llywodraeth Cymru
Welsh Government

Title: **Review of the PSO – Long Term Future**

Date: 11 October 2017

Our Ref: NK018661\GDD

RPS Planning & Development

Sherwood House
Sherwood Avenue
Newark
Nottinghamshire
NG24 1QQ

Tel: 01636 605700

Email: rpsnewark@rpsgroup.com

QUALITY MANAGEMENT

Prepared by:	RPS
Authorised by:	RPS
Date:	16 November 2017
Project Number/ Document Reference:	NK018661

Revision History

Rev.	Date	Description	Author	Checked
	17/2/2017	First Working Draft	CC	BoF
	4/3/2017	Working Draft checked and formatted	FoF	BoF
	20/7/2017	Working Draft Reviewed in light of client feedback	FoF	BoF
	29/09/17	Format adjustments	APa	GDD
	03/10/17	Corrections and updates	APa	GDD

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EXECUTIVE SUMMARY

Introduction

Public Service Obligation air services are a permitted class of aviation state aid that addresses defined socio economic need. In the EU they are governed by Regulation (EC) No 1008/2008 and Council Regulation (EEC) 3577/92.

The PSO (Public Service Obligation) between Cardiff Airport and a specially created civil enclave at RAF Valley, referred to in civil aviation terminology as Anglesey Airport, was first operated in 2007 and in the subsequent ten years has become established as a way of conveniently travelling between North West and South Wales for a same day return business trip. The level of use of the service has fluctuated from between 8,500 to 14,700 a year dependent on the level of fares, the reliability of the service and media speculation about the extent of political commitment to its long-term future. However, usage figures over recent months have shown welcome evidence of growth again following the emergency procurement of Van Air in early 2016 after the former operator Links Air lost its AOC (Air Operators Certificate) after a lengthy dispute with the Civil Aviation Authority (CAA).

The function of the PSO route, and the justification for the Welsh Government's support for it, is the need to overcome the geographical barrier created by the long surface journey times by rail or road between the Capital region of Cardiff and the North West of Wales. The air service reduces these journey times by over half, and crucially allows businesses in North Wales access to businesses in Cardiff and the wider South Wales region in a return day trip, and vice versa. This would be impractical (i.e. require an overnight stay) or certainly require a very long day if the air service did not exist.

Other such publicly supported air links are a feature of the Highlands and Islands in Scotland and can be found across many other EU countries, especially in Scandinavia, France, Italy, Spain, Portugal and Croatia. Whilst in many of those cases there is a strong social dimension to the service, in the case of the Welsh PSO, the great majority of trips (varying between 68% and 78% between 2014 and 2015) are for business purposes - these are split evenly between trip by the employees of private businesses and public authorities of different sorts (e.g. Welsh and Local Governments, local authorities and the education sector).

The temporary contract under which the service is currently being run extends to May 2017, but consideration is being given to extending that timeframe to allow time for Welsh Ministers to decide on the long-term future of the PSO based on the recommendations set out in this report:

- the recommendations of this review to be digested and a clear way forward agreed by Welsh Ministers; and then
- for their decisions to be implemented and if so determined for the PSO service to be re-tendered later this year for commencement in 2018.

The issues discussed in this report have been considered in line with the Welsh Language Standards and we can confirm that the continuation of the Cardiff-Anglesey PSO will not affect persons using the Welsh language, and will not result in the Welsh language being treated less favourably than the English Language.

The Origins and Scope of this Review

In early 2016 the Welsh Government (WG) commissioned two studies to examine how air connectivity within Wales, and from Wales to other parts of the UK and near Europe, could be improved:

- a) The first looked at possible ‘enhancements to the PSO (Public Service Obligation) air service between Cardiff Airport (CWL) and Anglesey Airport (VLY)’, with a focus on Anglesey and North West Wales (including how the PSO aircraft might be used more intensively and therefore efficiently).
- b) The second took the form of a review of ‘thin route PSO’ opportunities from CWL.

In the second half of 2016, the Welsh Government commissioned RPS (who worked with Northpoint Aviation - the authors of the earlier reports), to undertake a much wider-ranging review to determine the long-term future of the Intra Wales Air Service PSO. This review included:

- i. Options for reducing the costs/subsidy per head of the extant CWL to VLY service, including consideration into reducing frequency/ceasing service provision, and the economic value the PSO currently adds.
- ii. Comparing that service routing against a possible alternative from Hawarden to Cardiff.
- iii. Looking at the prospects for internal services from Haverfordwest and the other smaller airports in Wales and different combinations thereof.
- iv. Examining the impact that recent certification of Single Engine Turbine aircraft (SETs) for commercial public transport services by the *European Aviation Safety Agency* (EASA) might make on the viability of the different routes under consideration.
- v. Exploring the potential to increase the service offering, by increasing the aircraft size to circa 31 seats and linking the PSO to attractive domestic and European destinations, and as a result, also exploring the potential National Aviation Security Programme (NASP) requirements, where aircraft of greater than 19 seats are required on certain routes (e.g. out of Anglesey and Hawarden).

Together, this body of work is referred to as the Intra Wales Air Service PSO 2016 Review and comprises a series of component ‘technical’ study reports, which act as a series of addenda underpinning this top-level summary report.

The purpose of this Summary Report is therefore to; provide a synopsis of the key insights, analysis and conclusions from the technical reports; synthesise their findings; draw conclusions; and present recommendations for consideration by Welsh Ministers.

The content of its principal sections can therefore be précised as follows:

Section 1: Sets out the scope of the report and the background to the current PSO operation.

Section 2: Describes the sources, data and methodology adopted.

Section 3: Provides an overview of the PSO Enhancement Study, including the catchment for the PSO route, forecasts for the route itself including those associated with various potential route enhancements and others for additional services the PSO aircraft might be able to operate between its PSO commitments. These different enhancement/route options were then subjected to a commercial appraisal, an economic assessment and a Stage 1 WeITAG appraisal in order to highlight those that looked the most promising. The conclusions and recommendations of that study are recorded in paragraphs 3.26-3.31 of this summary report.

Section 4: Whereas the PSO work explored routes that it might be possible to serve with aircraft in the 19-34 seat category as an adjunct to the core PSO service, this Thin Route study focused on routes to and from Cardiff (CWL) of 50,000 passengers¹ a year or less, and therefore less likely to be commercially viable on a free-standing basis than those with a potential market larger than that. Using an equivalent appraisal process to the PSO enhancement options in Section 3, the options examined were not confined to those that could be operated by the PSO aircraft. Other aircraft and thicker routes over 50,000 passengers per annum that could survive on a basis other than through the support of a PSO (e.g. via commercial route development incentives and Route Development Funds) were also considered.

Section 5: Examined NASP (National Aviation Security Programme) Compliance at Anglesey and Hawarden airports in case it was determined that some or all of the services to be operated from one or both of these airports would require aircraft with more than 19 seats. This included identifying potential capital costs associated with any compliance measures.

Section 6: Considered the implications of using Single Engine Turboprop aircraft (SETs), on the PSO route and on other possible routes elsewhere in Wales. Comparative operating costs against a 19-seat aircraft benchmark and the pros and cons of two illustrative aircraft types are evaluated and some indicative conclusions drawn.

Section 7: Begins by examining the economic consequences of closing the PSO route before broadening out into a review of intra and extra Wales route options that could make up first a core network of services focused around the main PSO service and then a wider network encompassing airports such as Hawarden and Haverfordwest. These options are again appraised as previously.

Section 8: Required an analysis of the significant preceding route based evidence; the study constructed 12 strategic policy scenarios, that reflected the full range of options that had been considered, from reducing or shutting down the existing service, through various incremental enhancements, to using the existing PSO aircraft more effectively and developing either a core or more expansive network of intra-Wales routes and routes to London or other significant hub

¹ Occasionally the report uses the pax acronym for passengers in the narrative or tables

airports (e.g. Amsterdam, Paris or Frankfurt) by introducing additional PSOs. The scenarios are then subjected to WelTAG appraisal² and evaluation against a series of strategic policy objectives.

Section 9: Considers the case for the Welsh Government to purchase or lease the aircraft needed to service the PSO route(s), or enter into a joint venture with the private sector to do so. It also examines whether there may be a case for Cardiff International Airport Ltd to take over the running of Anglesey Airport from Ynys Mon Council and its current service provider Bilfinger Europa (presuming TUPE protection for frontline staff).

The summary analysis and the associated findings are then drawn together in a final chapter, setting out Findings, Conclusions and Recommendations under various policy related timelines – immediate, short-term, medium-term and long-term. Those findings, conclusions and recommendations are reiterated in full below.

Findings, Conclusions and Recommendations

Bringing Clarity to the Future of the PSO Service

There is a strong economic case for the retention of the PSO service between Cardiff and Anglesey airports based on the fact that journey time savings to business passengers generates Gross Value Added (GVA)³ that broadly matches the amount of subsidy being invested. In addition, it also supports existing jobs and has the ability to create new ones, particularly in Anglesey, and provides connectivity with South Wales which neither rail nor road can match for the level of financial support offered. Strategically, it provides an important functional and symbolic link that connects North and South Wales, which facilitates easier access to internal markets for Welsh companies.

Extending the Current Contract

The PSO shows clear signs of having the potential to grow further than witnessed to date, but in the short term, it needs a period of consistent unbroken operation, scheduling and pricing optimisation and most importantly, better marketing for that growth to be realised. In addition to these essential steps, avoiding further political speculation about the route's future is important if passenger confidence in, and usage of, the route is to grow.

The findings of this study programme suggest that there are a number of short term steps such as reversing the basing of the aircraft, extending weekday operating hours, adding rotations, keeping

² Transport initiatives in Wales can be appraised using WelTAG guidance at the planning stage, to ensure that they consider the economy, environment and society.

³ Gross value added is the measure of the value of goods and services produced in an area, industry or sector of an economy, in economics. In national accounts GVA is output minus intermediate consumption; it is a balancing item of the national accounts' production account.

fares competitive and increasing awareness of the service that could help to enhance the service's performance and improve the value for money that it already offers to Wales. These could all be tested, with the agreement of the operator, if the existing temporary contract were extended sufficiently to allow plenty of time for re-tendering the PSO.

Our economic impact assessment predicts that if a 19-seat aircraft operation were retained, but with extended operating hours and attractively priced fares, then by 2022, the number of passengers using the route could increase from what we considered to be a reasonable approximation of the normalised baseline in 2015 - circa 11,000 passengers per annum (ppa) - to just over 14,200 or 73% seat occupancy. Adding substantially improved marketing (including promotion through GDS⁴ systems) and a third rotation would achieve 19,150 (at a seat occupancy of 66%), creating an estimated 20 jobs and additional GVA of approximately £290k per annum.

If we were to apply a similar suite of enhancements, but increase aircraft size to 31 seats and remain with only 2 rotations a day on the route, the return is estimated to be almost 18,000 passengers per annum (a seat occupancy rate of less than 60%), with up to 18 jobs created and GVA in the region of £250k per annum.

This suggests that there is a strong case for extending the existing temporary contract to 30 September 2018 - long enough for commercial and operational innovations to be trialled sufficiently to inform the requirements of the subsequent 4-year contract. The extension to September 2018 will also provide reasonable time to undertake the tender process – allowing requirements to be fully scoped, and a future operator to be competitively procured and appointed 6-8 months ahead of the commencement of services. This vital lead time will enable the operator to successfully mobilise and undertake preparatory work before taking over the operational delivery.

Any extension to the temporary contract will require detailed negotiations with the current provider, who may seek additional compensation for taking on additional operational or commercial risks associated with some of the innovations proposed (e.g. basing the aircraft at Anglesey during the summer may need weekend positioning for maintenance to alternatives such as the Isle of Man or possibly Caernarfon). But it also provides a unique opportunity for 'real world' trial of these ideas, and generates invaluable empirical evidence for the medium to long term. With this in mind, we support the extension of the current contract.

⁴ A **global distribution system (GDS)** is a network operated by a company that enables automated transactions between travel service providers (mainly airlines, hotels and car rental companies) and travel agencies. Travel agencies traditionally relied on GDS for services, products & rates in order to provision travel-related services to the end consumers. A GDS can link services, rates and bookings consolidating products and services across all three travel sectors: i.e., airline reservations, hotel reservations, car rentals.

Immediate Recommendations:

- | | |
|-----|---|
| I | Retain the North-South PSO between Cardiff and Anglesey. |
| II | Extend the temporary contract with Van Air to 30 th September 2018 as soon as possible. |
| III | <p>In so doing, introduce a series of potential service enhancements and some targeted external support. These should include some or all of the following:</p> <ul style="list-style-type: none">▪ Increase the frequency with which the PSO aircraft is used to 3 rotations per day, either by adding a midday service on the Cardiff-Anglesey route or by identifying with the operator, a commercial non-PSO destination for the aircraft to serve.▪ Discuss a trial with the operator to test the demand for a reversed timetable by rescheduling the PSO and basing it at VLY for summer 2017.▪ Extend the operating hours at VLY as soon as this can be agreed with the RAF, but only if the new schedule requires it.▪ Negotiate any variation required to the current subsidy agreement arising from these changes, subject to an orderly handover being achieved to any new PSO dispensation, especially if it involves a new operator.▪ Increase the provision of marketing support on a match funded basis – we consider this could mean a capped public contribution of up to £25,000 in the period to September 2017 and a further £50,000 between September 2017 and the end of the extended contract period.▪ A 'micro-networking' marketing plan needs to be agreed between the airline, the airports and other key stakeholders (North Wales' tourism interests, Isle of Anglesey County Council (IACC) and Gwynedd County Council). The Welsh Government should lead preparation of the plan via a PSO stakeholder marketing group, but once it is complete, delegate responsibility for implementation to a suitable member of the collaboration.▪ Resource commitments in cash or kind to be secured from the marketing collaboration members, and identify a way to manage, coordinate and monitor on-going efforts. These commitments can be advertised in the Invitation to Tender document for PSO bidders where they may be presented as match funded undertakings by the operator. |

Maximising Use of the PSO Aircraft

Realistically, even if the aircraft contracted for the Cardiff - Anglesey PSO were to be based at RAF Valley, it would be difficult to achieve four rotations a day without extending the length of the RAF Valley's current operating hours. Initial approaches to the RAF indicated they might be willing to explore some modest variations on weekdays, providing they were appropriately compensated, but would not be willing to introduce weekend operations due to a high proportion of RAF personnel leaving the base at weekends to return home to family or visit friends.

Experience suggests coming to an agreement with the RAF will take some time, and is thus better assigned as a 'short term' rather than 'immediate' recommendation.

The study did, however, identify a number of exciting potential route opportunities for the next 4 year PSO contract (October 2018 – September 2022) that can be used to explore, especially if the size of the aircraft is increased from 19 to +30 seats. Conceptually, if the implementation of the 'immediate' recommendations has the positive impact on passenger numbers we expect, then the use of a larger aircraft twice a day on the PSO route may ultimately be justified by the end of the next PSO contract period (i.e. 2022) as load factors on a twice a day service would have reached 65%.

However, the big attraction of securing the use of a larger aircraft on the PSO is that it would open up the potential to serve other destinations like a London airport from Anglesey (initially Luton, and eventually when the third runway is open, Heathrow) and similarly other hub destinations like Amsterdam (for which there is evidence of significant demand for a one a day service from North West Wales) or Paris, using the aircraft to add a second rotation from Cardiff. Thirty seat aircraft have the attraction of being pressurised and in some cases substantially quicker than 19 seat equivalents and are therefore more attractive to passengers, are more likely to be accepted as meriting a slot at congested airports and have better route economics at equivalent load factors therefore offering scope for cheaper fares.

Although the prospects for some of these routes (particularly the overseas hubs⁵), may be made more speculative should bids for the next PSO remain based on a 19- seat aircraft, a London flight would remain a possibility, with Northolt a destination that should be explored with the MoD, and there are other domestic options like Belfast or the Isle of Man which may generate interest.

The 2018-22 PSO Tender process

The extension of the current temporary arrangements provides an important opportunity to better adapt the next four year PSO to secure preferred outcomes. These will include:

- seeking a strong operator,
- with a larger aircraft,
- offering credible additional use of the aircraft on non PSO task(s),
- based on a persuasive route development plan that includes increasing patronage and yield, and hence reducing requisite subsidy,
- access to extended marketing capability (which may include GDS visibility, interlining, franchising),

⁵ Airline hubs or hub airports are used by airlines to concentrate passenger traffic and flight operations at a given airport. They serve as transfer or stop-over points to get passengers to their final destination. They are part of the so called hub-and-spoke system.

- a persuasive and well thought out marketing plan for extending the commercial reach of the PSO service (geographically and in terms of market segments (e.g. attracting inbound leisure passengers to North West Wales), developing new routes, and working with both Cardiff and Anglesey airports and local stakeholders to optimise the value for money of on-going marketing support.

It also provides a longer lead time before launch to permit optimal preparations and marketing. This includes putting in place new arrangements with the RAF (see below) and marketing the route(s) for several months in advance using micro networking techniques to maximise value for money.

The recommendation around enhanced and sustained marketing provision is based upon the early experience of Highland Airways on the route, where they enjoyed patronage at least 2,000 p.a. more than their successor operators. Highland Airways also enjoyed significant stakeholder support from a range of agencies including IACC, CWL, the Welsh Language Board and deft community micro marketing that was summarised in an appendix to the PSO Enhancement Study. Such techniques (e.g. social media campaigns, competitions with local radio stations, PR stories, cross marketing with attractions and key accommodation suppliers), rather than simply relying on expensive newspaper or poster advertising, are in common use at smaller airports and are recognised as being effective.

Scottish evidence also suggests an uplift in patronage on a PSO, when a higher profile franchise operator took over the route from a standalone airline. There was also evidence from the route when a 'bolder' yield management strategy, where deeper ticket discounts were offered, had a positive impact on carryings both during Highland Airways' and Links Air's tenures.

Implications of Basing the Aircraft at Anglesey

If, as a result of the 2018-22 PSO tender process, it looks like the operator will be willing to base their aircraft at Anglesey, then a dedicated hangar would likely be a requirement for permanent overnighting. A Rubb-style hangar can be erected within 3-4 months and at modest cost (c£750,000 for a 19 to 31-seat aircraft plus any required groundworks) and has the advantage of being demountable and therefore the capability of being moved elsewhere if needed.

Introducing a 31-seat aircraft would also require the airport at Anglesey to become NASP (National Aviation Security Programme) compliant. This would require level three screening equipment to be introduced and a range of other measures airside to prevent intrusions into the restricted area. Costs are again estimated at c£750,000.

Engagement with the RAF

The RAF is a key partner in the PSO operation providing the airside infrastructure and operations support without which the civil enclave could not operate. Variations to, or expansion of, the current PSO service will require their continued collaboration and in some cases material changes to their existing operating hours.

Of the recommendations above, the marketing scheme and probably a single additional midday rotation can be implemented without varying the existing agreement with the RAF/DIO⁶. Initial indications are that they may be willing to show some flexibility, but new arrangements will take time to negotiate and the aim must be to secure temporary dispensations with a new agreement coming into place at the commencement of the new PSO.

The new arrangements are likely to result in additional costs both in terms of additional charges from the RAF for the use of their airfield and capital costs to enhance the capability and capacity of facilities within the existing or expanded civil enclave. The RAF will be justified in passing on these costs in full if they are solely for the purpose of PSO related air transport movements and outside their current core operating hours; moreover, if not cost reflective, this could give rise to issues relating to illegal state aid. The scale of these costs need to be firmed up as quickly as possible and if accepted, turned into appropriate budgetary provision moving forward.

The position concerning state aid also needs to be confirmed. Although it is possible that a formal notification may not be needed to cover any additional revenue support costs or capital expenditure on enhanced facilities on de-minimis threshold or Services of General Economic Interest (SGEI) grounds for future accounting officer and audit purposes, it would be prudent to secure DfT and EU confirmation of this. SGEI are economic activities that public authorities identify as being of particular importance to citizens and that would not be supplied (or would be supplied under different conditions) if there were no public intervention. Examples are transport networks, postal services and social services.

Airport Governance

For a variety of reasons, preparation for the new PSO may provide the opportunity to review the ownership and operation of the civil enclave at Anglesey. These are set out in more detail in Section 9 of the report, but are associated with operating efficiencies, the availability of marketing resources, expertise in security and a seamless approach to Welsh Government policy and implementation.

For this reason, we believe serious consideration should be given to asking Cardiff International Airport Ltd to take over the running of the Anglesey Airport operation on the Welsh Government's behalf, at a date to be agreed with Isle of Anglesey County Council (IACC) and their contractor Bilfinger. TUPE rules would mean existing staff would move with any transfer of the operating contract. The Transfer of Undertakings (Protection of Employment) Regulations 2006 known colloquially as TUPE, are the United Kingdom's implementation of the European Union Business Transfers Directive. It is an important part of UK labour law, protecting employees whose business is being transferred to another business.

We are aware that IACC is currently the legal owners of Anglesey Airport facilities built with the benefit of a long lease from the RAF. However, the costs of the operational management are fully underwritten by the Welsh Government and IACC are under-resourced to take on the expanded client role for a major expansion of the civil enclave envisaged in our other recommendations.

⁶ Defence Infrastructure Organisation

Therefore, it would almost certainly be simpler all round if ownership was transferred to the Welsh Government and they took responsibility for finding an operator.

Services from Hawarden

The possibility of developing service offerings out of Hawarden are, in our view, limited until 2022 and beyond, however, there would be merit in discussing the possibility further with APG and Airbus during the extended contract period so that a clear understanding can be presented to tenderers about the facilities and charges that would be offered to a possible PSO operator if access were to be permitted at all.

Our indicative view, prior to these formal discussions, is that securing access to Hawarden is likely to be too expensive, would require significant capital investment, may attract state aid complaints from the nearby Liverpool and Manchester Airports and makes the continued serving of the North-West Wales region by air, which all the evidence from the supporting technical studies indicates is strategically important, more complicated and therefore potentially also more expensive. Furthermore, on a very strict reading of the PSO Regulations we have doubts about whether the services between Hawarden and Anglesey/Cardiff Airports would qualify as a PSO.

In the longer term (i.e. for the PSO period 2022-26) it may be possible to develop a package of key stakeholder support (especially amongst companies based in the relevant enterprise zones at either end of the route), to secure 9-seat direct service linking Hawarden with Cardiff, but that can be for a future review.

More significantly, in a drop-in or triangulated format (e.g. VLY-CEG (Hawarden)-LHR-CEG-VLY) is the most likely way North Wales will secure direct access to Heathrow when its new runway opens, due to the likely limitations that will be imposed on the number of slots that will be released for domestic services. Such a service would generate very substantial positive benefits in terms of connectivity for the wider economy of North Wales and, in our view, should be aggressively pursued by Welsh Government over the next 2 years for commitments from the UK Government and Heathrow during its DCO (Development Consent Order) process.

Access to Heathrow

Both demand and economic impact investigations indicated that access to LHR would score highly from South Wales as well as North Wales. A shuttle service 3-4 times a day would primarily serve the onward connecting market from South Wales, most of which currently drives and parks at Heathrow. Its impact on the point-to-point market heading for central London from South Wales, which will be well-served by improved rail journey times, is expected to be small. But with an overall market we estimate at over 200,000 passengers, securing slots for such a shuttle service from Cardiff to Heathrow would be of great significance economically and ought to be a high priority for the Welsh Government in the short term, with the objective obtaining a commitment, both political and contractual, between the Welsh Government and the UK Government (and arguably also Heathrow) before the Development Consent Order (DCO) application for the third runway is submitted in 2019.

Cardiff Thin Route Support

Our studies identified potential for route development out of CWL both with the PSO aircraft (particularly if it was 29+ seat) as well as for routes defined in the study as 'thin' (less than 50,000 passengers per annum). State aid measures above and beyond more normal airport route development mechanisms were examined. In addition to the Heathrow Shuttle above, other hub destinations in mainland Europe like Frankfurt were identified as potentially high performing; especially if a double daily weekday frequency could be reached. A number of domestic routes from Cardiff also look promising and merit further investigation, either because the links currently don't exist or because they would benefit from enhanced daily frequency. These include Manchester, Belfast, Leeds, Newcastle, Aberdeen and Norwich.

Options for securing these objectives include additional PSO's, support from UK Government RACF⁷ funding or a time limited route development scheme established and funded by the Welsh Government itself but in line with established UK-EU protocols.

Short Term Recommendations:

- | | |
|------|--|
| I. | Include the option of supporting a 30-seat aircraft in the 2018-22 tender process and ask bidders to highlight any other destinations they might seek to serve if the PSO were to be awarded on that basis. |
| II. | Issue the Sept. 2018 PSO Tender in Autumn 2017 with aim to award in January 2018. <ul style="list-style-type: none">▪ Ensure Tender Options explore both current 19 seat solution and larger aircraft solutions (ideally with additional midday PSO or credible non-PSO route development initiatives encouraged).▪ Ensure Tender Selection Criteria properly weights preferred outcomes and this will include superior patronage development and marketing plans; basing of aircraft; additional use of aircraft; GDS⁸, interlining, franchising or other benefits. Properly weight quality versus cost in evaluation – we suggest 70% to 30% respectively.▪ Pre-canvas a sample of operators to better inform the options being tendered. |
| III. | If, as a result of a summer trial in 2017, basing the aircraft in Anglesey and adapting the timetable accordingly looks promising, a site for a hangar will need to be agreed with RAF Valley and a value for money hangarage solution identified and implemented. |
| IV. | If 29+ seater is successful in tender competition then invoke NASP compliance preparations in parallel with lead in time for a new PSO launch. Refine NASP preparations further as a contingency in the interim. |

⁷ The Regional Air Connectivity Fund is a DfT initiative to support route development in conformity with permitted State Aid Route Development Funds

⁸ Global Distribution System results essentially in more visible ticketing

- V. Negotiate a new agreement concerning the operation of the civil enclave, covering opening hours, additional charges associated therewith, approval to introduce NASP measures should these be needed in the future and permission to expand car parking and other supporting infrastructure (e.g. an aircraft hangar) if required.
- VI. Appoint a project manager for the capital works:
- Draw-up a timetable for designing, securing approval and having budgetary authorisation to complete the works;
 - Generate architectural and engineering drawings for the planned physical enhancements (inside and out);
 - Specifications for any new equipment associated therewith;
 - Secure planning and building consent for the designs.
- VII. Develop appropriate budget provision– capital and running cost – to cover these items.
- VIII. Assess whether state aid approval is needed and either:
- Secure DfT and the European Commission confirmation that formal state aid notification is not required; or
 - Submit a notification for the full potential expansion under these recommendations and all those that follow within the next 3 calendar months in order that state aid approval is in place before the operator of the new PSO is chosen and the capital works begin.
- IX. Tender and undertake any facilities enhancement work associated with the new operational schedule prior to the new PSO contract commencing.
- X. Explore with IACC and CWL the practicality of CWL taking over responsibility of running Anglesey Airport and managing the NASP upgrade.
- XI. Conclude outline discussions with APG and Airbus about using Hawarden for civilian scheduled services:
- Gain clarity on the need to build a new passenger terminal or re-task the restaurant (which would be less expensive) if NASP was required.
 - Explore APG's appetite for investment in any such civilian air service initiatives.
 - Ensure Airbus is informed and content with how things are 'left'.
 - Seek 'North Wales' slots at LHR3 for a triangulated air service.
 - If Single Engine Turbine (SET) aircraft are obtained for HAW-CWL (see below) consider other permutations for the aircraft (e.g. HAW-CEG).
- XII. Pursue the case for slot access from CWL and VLY to LHR strongly with DfT and the wider UK Government.

- XIII. Active support should be offered to CIAL for 'thin route' development, independent of, but complementary to, the existing PSO, using either further PSO designations or a formally authorised Route Development Fund (RDF) to bolster standard airport commercial efforts in this area, but also to act as an alternative to discounted APD (Air Passenger Duty) if this power is not ultimately devolved to the Welsh Government.
- Explore further national and international PSO designations.
 - Develop a formally authorised Route Development Fund (RDF); most probably based on similar methodology to the already approved DfT Regional Air Connectivity Fund.
 - Anticipate and counter competition and state aid complaints from Bristol Airport and establish definitively that Bristol and Cardiff do not share the same catchment area. This is crucial to all potential initiatives in this area. Commission a Catchment Study that demonstrates the case for this assertion.

Expanding the Network from North West Wales

As outlined above, the new PSO (i.e. 2018-22) is likely to be the opportunity to consolidate any trial undertaken in basing an aircraft in North West Wales. This maximises the opportunities for developing additional routes from there. The subsequent PSO (2022-26) might then be used as the chance to expand the network of routes from Anglesey by adding additional services and possibly introducing a further PSO and aircraft.

Single Engine Turbines

It is arguable that this is also the time for a decision to discount the use of 9-seat Single Engine Turbines (SETs) at higher frequencies on the main PSO route. Of the SETs considered the Pilatus PC12 is the most attractive option but costly to run; the Cessna Caravan offers lower costs but does not provide an attractive passenger environment and only achieves minimal cost savings compared to a 19-seat aircraft if there is sufficient demand to justify three rotations a day. The SETs would also introduce significant constraints on seat capacity and could affect future levels of demand as there is evidence that some passengers will avoid flying on very small aircraft (as happened during Links Air's use of a King Air on the PSO in December 2015).

The use of SETs should only be contemplated if demand drops precipitously to less than 7,500 passengers on an annual basis and it is considered desirable to maintain the PSO service. With this exception, it is our view that the use of SETs could be restricted to long-term options such as a (HAW) Haverfordwest – CWL to offer connecting flights to a Heathrow shuttle from Cardiff, and to any cross-country options (e.g. HAW - CEG (Hawarden) or Llanbedr to Cardiff as and when these are considered necessary or expedient.

Aircraft ownership Option

In addition to keeping the progress of the PSO under close scrutiny and ensuring its cost-effective delivery, the issue of potential ownership of the aircraft being used should be explored further as option, perhaps with an eye on the 2022-2026 PSO period.

Medium – Long Term Recommendations:

- | | |
|------|--|
| I. | Review future route prospects, when the performance of services provided under the 2018-22 contract becomes clear. |
| II. | Do not pursue SET for current PSO. Revisit SET if CWL gains access to LHR. This aircraft could then provide a useful feeder flight from HAW to CWL, for its shuttle to LHR and also offer the potential to provide a CEG-CWL link. |
| III. | Explore the possibility of a Joint Venture with an operator to be developed to help share risk and allow the Welsh Government to benefit from any acquisition of Heathrow slots. |

1 INTRODUCTION

- 1.1 Five in-depth technical studies have been undertaken as part of a thorough review of the PSO model supporting the current air service between Cardiff and Anglesey. Their aim has been to inform decisions about the route's long term future and the possible extension of the PSO mechanism to other routes within Wales and to destinations elsewhere in the UK. By exploring a wide range of possible scenarios and route options, the technical reports have provided a wealth of information and analysis, which this summary document has condensed to produce an accessible synopsis of the work including key findings, conclusions and recommendations.
- 1.2 Building upon two earlier studies – the first to examine possible enhancements to the PSO (Public Service Obligation) air service between Cardiff and Anglesey (including how the PSO aircraft might be used more intensively and therefore efficiently), the second to review a range of thin route⁹ PSO opportunities to operate out of Cardiff Airport - the Welsh Government commissioned RPS who worked with Northpoint Aviation (the authors of the earlier reports) to extend the programme of work into a much wider, more detailed review.
- 1.3 The scope of this extended work included:
- I. Options for reducing the costs/subsidy per head of the extant CWL to VLY service, including consideration into reducing frequency/ceasing service provision, and the economic value the PSO currently adds.
 - II. Comparing that service routing against a possible alternative from Hawarden to Cardiff.
 - III. Looking at the prospects for internal services from Haverfordwest and the other smaller airports in Wales and different combinations thereof.
 - IV. Examining the impact that recent certification of Single Engine Turbine aircraft (SETs) for commercial public transport services by the European Aviation Safety Agency (EASA) might make on the viability of the different routes under consideration.
- 1.4 Exploring the potential to increase the service offering, by increasing the aircraft size to circa 31 seats and linking the PSO to attractive domestic and European destinations, and as a result, also exploring the potential National Aviation Security Programme (NASP) requirements, where aircraft of greater than 19 seats are required on certain routes (e.g. out of Anglesey and Hawarden).

⁹ Thin Route study focused on routes to and from Cardiff (CWL) of 50,000 passengers a year or less, and therefore less likely to be commercially viable on a free-standing basis than those with a potential market larger than that.

- 1.5 Together this body of work is referred to as the Welsh PSO 2016 Review and comprises a series of component 'technical' study reports (listed below), which act as a series of addenda underpinning this top-level summary report:
- I. The Welsh PSO Anglesey Route Enhancement Study including options for complementing the PSO with middle of the day flights.
 - II. Thin Route Development Options from Cardiff Airport, which examined options beyond those pertaining to the additional use of the PSO aircraft.
 - III. Evaluation of NASP Compliance at Anglesey and Hawarden Airports.
 - IV. Long Term Future Options for Aviation PSOs in Wales.
 - V. Aircraft-related Considerations Associated with Welsh PSO Procurement.
- 1.6 The purpose of this Summary Report is therefore to; provide a synopsis of the key insights, analysis and conclusions from the technical reports; synthesise their findings; draw conclusions and present recommendations for consideration by Welsh Ministers.

Background to the Current PSO Operation

- 1.7 The Welsh Government introduced a business focussed north-south PSO air link in 2007 which aimed to improve connectivity between North and South Wales for the benefit of the Welsh Economy. The PSO route was operated first by Highland Airways from May 2007 until March 2010, at which point the airline went into receivership. The PSO was immediately retendered on an emergency interim basis and Manx2, with its partner airline FLM, recommenced the service on 10th May 2010. However critically, it is to be noted, the PSO suffered a 3 month break in service. A full retendering process took place shortly thereafter, with a four-year contract awarded to Manx2 and FLM in December 2010.
- 1.8 However, at the start of November 2012 FLM lost its Air Operator's Certificate (AOC) and was replaced as the route's carrier by Links Air. Although the Welsh Government agreed the novation of Manx2's rights and liabilities under the contract to a new company Citywing on 1 January 2013, in March 2013 the Welsh Government decided to assign Links Air to run the air service contract for the remaining period of the contract (i.e. from 17 June 2013 to November 2014).
- 1.9 In a subsequent tender competition, the Welsh Government awarded Links Air a new PSO contract for the route commencing in December 2014 and running until December 2018. However, in October 2015, Links Air had its AOC suspended by the Civil Aviation Authority (CAA). Thereafter they sub-contracted aircraft from a number of companies to fulfil the service. Links Air withdrew from the route in January 2016, and following competitive tender was replaced by Van Air on an interim basis, which was subsequently extended to May 2017.
- 1.10 The service currently consists of a 19 seat LET410 (See Figure 1) that is based in Cardiff undertaking two rotations each day – early morning and late afternoon - Monday to Friday (none at weekends), with an earlier finish on Fridays because of shorter RAF opening hours at RAF Valley, of which Anglesey Airport Terminal is a 'civilian enclave'.

Monthly carryings since the route started are shown in the graphic below. (please note this section was completed before VanAir withdrew)

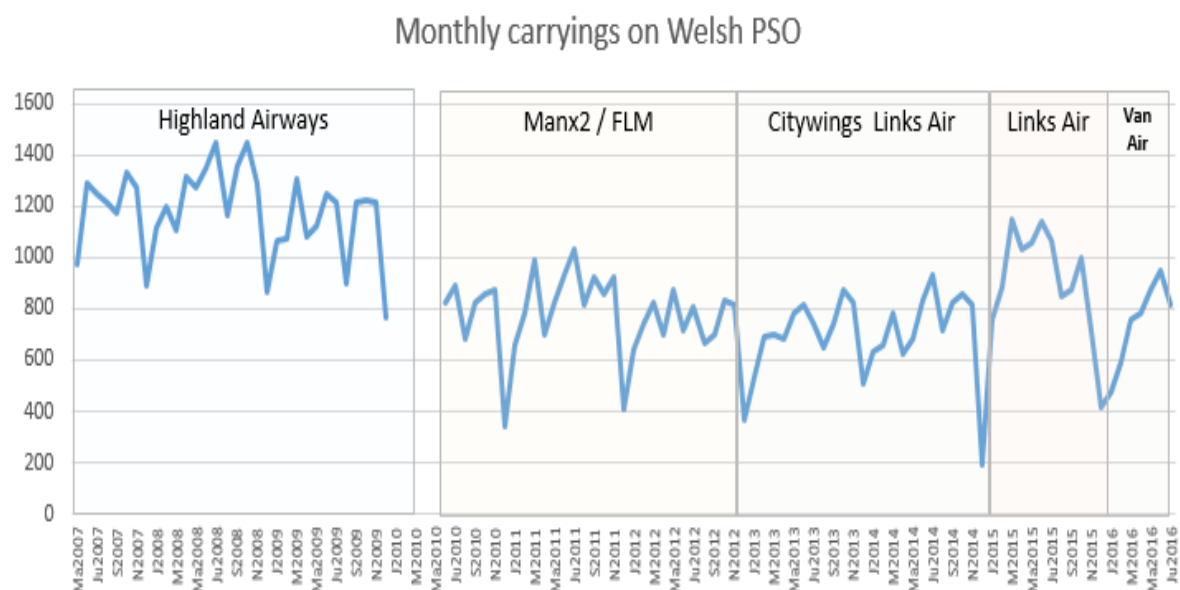


FIGURE 1: LET410 UNPRESSURISED AIRCRAFT CURRENTLY (SIC) ON PSO ROUTE - OPERATED BY VANAIR AND MARKETING BY CITYWING



1.11 The service's chequered history has ensured that the performance of the PSO route, as measured in passenger volumes, has been characterised by significant volatility. Its recent under performance is likely to reflect, at least in part, the many challenges the service has faced, not least:

- The 2008/9 recession;
- Interruption of service resulting from an airline failure in 2010;

- Changes to the operator and aircraft type used;
- Suspension of AOCs (for both FLM and Links Air);
- The 2016 unexpected withdrawal of service and emergency / temporary contracts to keep the service going;
- Some of this translated into bad news stories and speculation in press;
- Inconsistencies in pricing policies;
- Under-resourced marketing of the route.

Opportunities Looking Forward

1.12 The Review has identified some significant opportunities that could help to improve the existing route's fortunes and increase its performance, namely (in no particular order):

- Major new power and commercial developments are planned on Anglesey requiring contractors and their advisors to access the area efficiently; for instance, the Swansea Tidal Lagoon Project is an important potential energy project that could have interaction with Anglesey's Energy island;
- The potential to attract more inbound tourists, not just from the rest of the UK, but also international with a particular focus on the short break market built around the outdoor tourism assets and experiences North West Wales has to offer;
- The potential to encourage dynamic packaging through collaborations between the airline, airports and local accommodation and attractions providers;
- The potential scope for air services to operate to other destinations so that the aircraft is not standing idle when it is not needed for PSO related activity;
- That potentially different aircraft type used could be more compatible with stimulating new markets (e.g. a route to London and ad hoc charter operations), as well as the requirements of the core PSO service;
- The potential scope for changes to operating hours/days to maximise market utility and exploring with key stakeholders and businesses the value of a service that will enable key sectors and Enterprise Zone's in different parts of Wales to be linked quickly and efficiently.

2 COLLATING THE EVIDENCE

Context

2.1 It is useful to keep in mind that the suite of technical reports supporting this summary document have taken over a year to prepare, and that during that time there have been a number of important developments that have directly, or indirectly, influenced the PSO, and the scope of the work required for this review, including:

- the loss of AOC and subsequent withdrawal of services by Links Air;
- the emergency contract position currently imposed on the route;
- the selection of Heathrow for South East runway expansion;
- the Brexit vote and the Prime Minister's recent clarification of the implications thereof;
- a change of Welsh Ministers bringing the desire for a fresh look at the PSO; and
- a number of successful route developments and growing passenger numbers at Cardiff Airport.

The technical reports are shown in Table 1.

TABLE 1: STUDY TOPICS, TIMING AND SEQUENCING

Welsh Aviation Review Technical Reports Summary	Dates
Enhancement options to the PSO (Public Service Obligation) air service between Cardiff Airport (CWL) and Anglesey Airport (VLY) or the report was more formally entitled <i>Demand Forecasting, Economic Analysis and Exploring Extending the Aircraft Size and Operating Hours at Anglesey Airport with a supporting Appendices Section.</i>	January – April 2016
Thin route development opportunities from CWL with the report more formally entitled <i>Thin Route Development Possibilities out of Cardiff Airport and appropriate State Aid Mechanisms to help deliver.</i>	April – July 2016
Exploring the potential National Aviation Security Programme (NASP) requirements, where aircraft of greater than 19 seats are required on certain routes (e.g. out of Anglesey and Hawarden). The report more formally entitled Welsh Aviation Review - <i>National Aviation Security Programme Implications</i>	November – December 2016
Options for reducing the costs/subsidy per head of the extant CWL to VLY service, including consideration into reducing frequency/ceasing service provision, and the economic value the PSO currently adds and Comparing that service routing against a possible alternative from Hawarden to Cardiff. The report more formally entitled <i>Technical Report into Long Term Future Options for Aviation PSOs in Wales with a supporting Addendum Section.</i>	September – December 2016
Examining the impact that recent certification of Single Engine Turbine aircraft (SETs) for commercial public transport services by the <i>European Aviation Safety Agency</i> (EASA) might make on the viability of the different routes under consideration. It also included a consideration of Aircraft Considerations Associated with Welsh PSO Procurement The report was more formally entitled Welsh Aviation Review - <i>Aircraft Related Considerations</i>	November – December 2016
The Intra Wales Air Service PSO 2016 Review - Summary Report	January – February 2017

- 2.2 The underlying technical documentation reflects these changes in real time, depending on commissioning and completion dates. Consequently, one of the aims of this summary document is to draw upon each of them as required and provide a comprehensive over-arching view of all the policy alternatives evaluated as at January 2017.

Sources and Data

- 2.3 The current review has been fortunate in having a wealth of historic studies into the Wales PSO service to draw upon, in addition to several route specific passenger surveys, up to date usage data from IACC, and most recently the 2015 CAA Passenger Survey. Northpoint also secured access to some old Highland Airways data and spreadsheets that help to underpin important

assumptions and permitted a marketing case study to be undertaken during the initial phases of the work.

- 2.4 This core material was supported by a broader literature review, which is detailed in the extensive Bibliography (see Appendix A), historic CAA data, a range of stakeholder consultations and a series of site visits and stakeholder meetings in January and November 2016 (see Appendix B).
- 2.5 The study made use of RDC Aviation's APEX¹⁰ software, which models the commercial economics of air services based on a wide range of changeable variables, with the key output being a four-year profit and loss projection or an estimate of the average fare (excluding taxes) needed to breakeven. RDC was asked to adapt APEX for this work, by adding new aircraft types and airports that to the database. RDC was also asked to update an intra-Wales gravity model used in the original 2003 feasibility studies, to generate point to point demand forecasts for sectors where there are no existing services. The 2003 version of the model produced a range of estimates for the Cardiff - Anglesey route, which the route later demonstrated, were essentially sound and within acceptable margins of error.
- 2.6 In addition, benchmarking was undertaken on similar approaches elsewhere across Europe that are comparable to the Welsh PSO, with particular reference to internal domestic PSO routes and networks, and to other thin route services (e.g. to the rest of the UK and Europe). This provided useful comparative material across a range of scenarios.
- 2.7 Finally, the technical studies supporting this summary report have also benefited collectively from the contributions of a number of in-house and external experts engaged by Northpoint and listed in Appendix C.
- 2.8 It is likely that this is the most exhaustive study of the PSO, and options for its future that has been commissioned to date.

¹⁰ APEX is an airline performance analysis platform developed by RDC Aviation

Methodology

Route Options

- 2.9 We have applied the same methodology and approach used in the original PSO Enhancement (Anglesey) and Thin Route Development (Cardiff) studies to the evaluation of different route options in the largest and most recent of the technical reports, the PSO Review Study. The latter takes in new airports, aircraft types and operating concepts, but in order to optimise the level of read-across that is possible at a route level, we have sought to be consistent in the techniques used for demand forecasting, commercial evaluation and route appraisal (including the use of Stage1 WelTAG¹¹ analysis). There were some differences, because the demand forecasts we have generated have needed to draw on a number of different techniques depending on circumstances and data availability; but in most regards, there is a good deal of commonality across the appraisal processes.
- 2.10 In so doing we have been able to create recognisable key stages in each of the route focused technical report's evidence base - a market analysis, usage forecasts, financial appraisal, economic impact assessment and then broad strategy and policy criteria via the WelTAG process drawing on a variety of metrics:
- Accessibility - distance, mode competition, travel times/costs;
 - Commercial viability- load factors, subsidy needed;
 - Economic impact – employment, user benefits and GVA;
 - Environmental effects - CO² emissions.
- 2.11 It is worth highlighting that the reason a single environmental metric was used is because others, such as noise, air quality, ecology and surface access, were considered less prominent as the traffic volumes/movements involved are too small to result in any material effects, especially as at an airport level the services envisaged will predominantly use existing infrastructure.

Policy Scenarios

- 2.12 The brief in the Longer Term PSO Review, required completion of:
- The Aircraft Considerations (or SET - Single Engine Turbine) Report;
 - Site visits to all the airports in Wales potentially capable of handling scheduled passenger transport air services; and

¹¹ WelTAG is a methodology used to appraise transport projects in Wales. A Stage 1 refers to an initial less detailed high level appraisal.

- The NASP Evaluation of Anglesey and Hawarden; and the need to take into account the range of other relevant issues such as:
- airfield infrastructure requirements, associated operational and capital costs, and ownership and governance structures;
- the application of how PSO regulations might be applied; and
- the need to look at multi-route (or network) options.

2.13 We sought to sketch out a range of broader strategic scenarios that took account, and in some cases combined, the most promising looking route pairings, stopovers and triangulations, as the basis for drawing together and navigating through the wide range of policy options that all the preceding work had thrown-up.

2.14 To do this we developed twelve 'scenarios' for evaluation using WeITAG and then weighted the appraisals based on five strategic objectives, in order to help tease out those that looked particularly ineffective and conversely also the most promising. This work is set out transparently in the main addendum report, and is a central plank of this summary report, because alongside the financial implications of each scenario it underpins and has helped to shape the recommendations that then follow.

3 THE ANGLESEY (OR WELSH PSO) ROUTE ENHANCEMENT STUDY

Catchment and Assumptions

- 3.1 This study focused on how the aircraft allocated to provide the PSO service between Cardiff and Anglesey could be used to offer other 'commercial' (i.e. unsubsidised) operations alongside its PSO commitments, whilst also growing the patronage of the existing PSO service. The alternative idea of basing the aircraft in Anglesey and exploring a range of derivative route development opportunities was explored in some detail, as were possible alternative route enhancements out of the current Cardiff base.
- 3.2 The current PSO operation carried 9,000 passengers (pax) in 2015. This was considered shy of the route's real potential if operated consistently, without threats of closure, with proper marketing and competitive fares. For this reason, a figure of 11,000 pax was used as the baseline assumption in subsequent forecast iterations. The growth in numbers over the then previous three months of 2016 suggests this was probably an appropriate assumption.

FIGURE 2: CATCHMENTS SUPERIMPOSED ON ARUP (2015) SAMPLING MAP



- 3.3 The catchment area for the service in North West Wales is based upon Arup's 2015 study (see Figure 2). We have presumed to overlay a solid red line to indicate the core catchment and the dotted red line to indicate a larger catchment presumed for new attractive destinations, particularly capital cities in the UK or routes to international hubs, to reflect anticipated improvements marketing and the inclusion of important inbound tourism hotspots (e.g. Mt Snowdon, Conwy Castle, Llandudno and the Blaenau Ffestiniog railway).
- 3.4 This then allowed us to use CAA survey data, based upon the boundaries of Gwynedd and Anglesey, as the basis for calculating existing trips with an origin or destination within the catchment, which is represented graphically by the dotted line in Figure 2. Essentially, this marks the estimated boundary which Anglesey based services would offer greater benefits to passengers than making a 2 to 3-hour journey to Manchester Airport to get flights to the same destination.

Forecast Methodologies Used

- 3.5 In order to differentiate between forecasts of future demand for the core PSO route and those for potential route network enhancements out of both Cardiff and Anglesey this study adopted different forecasting methodologies.

TABLE 2: USAGE FORECASTING SCENARIOS MODELLED FOR THE PSO ROUTE

1A	Do Nothing-Higher Base Fares
1B	Do Nothing-Lower Base Fares
Potential Service Enhancements	
2A	Longer Day-Higher Base Fares
2B	Longer Day-Lower Base Fares
3A	Third rotation-Higher Base Fares
3B	Third rotation-Lower Base Fares
4A	Larger aircraft-Higher Base Fares
4B	Larger aircraft-Lower Base Fares
5A	Larger aircraft +third rotation-Higher Base Fares
5B	Larger aircraft +third rotation-Lower Base Fares
6A	Do Nothing + Sunday pm rotation-Higher Base Fares
6B	Do Nothing + Sunday pm rotation-Lower Base Fares

Other Potential Sources of Traffic Generation	
7A	Improved and Better Resourced Marketing Non-Franchisee Operator-Higher Base Fares
7B	Improved and Better Resourced Marketing Non-Franchisee Operator-Lower Base Fares
8A	Franchise Operator, including GDS and Code Share at Cardiff Airport-Higher Base Fares
8B	Franchise Operator, including GDS and Code Share at Cardiff Airport-Lower Base Fares

- 3.6 In the former case, where substantial data on historic performance is available, we have relied on making incremental forward projections based on historic performance and several carefully defined assumptions about service enhancements (Outlined in Table 2), to generate a series of transparent variant forecasts for the PSO. A detailed range of forecasts was generated in this way, using patterns in the extensive historical data set for the route, but also experience from other thin routes and PSOs. This resulted in forecasts for variants such as timetable changes and weekend usage, employment of larger aircraft, GDS visibility, different yield management approaches, the operator be a franchisee of a bigger airline and other variables such as increased frequency. The results are reported in the next section of this chapter.
- 3.7 In the latter case (i.e. the new route options), where PSO data coverage does not exist because there are currently no services, we reverted to traditional industry standard 'bottom-up' route forecasting, using CAA survey data and fairly conservative assumptions about market penetration and stimulation rates.
- 3.8 Operational constraints and possible enhancements at RAF Valley were reviewed (e.g. opening hours, lack of an overnight hangarage, weekend closure and NASP compliance), as were likely aircraft types on the route. Rough order of magnitude costs of various options were then estimated, relevant European air operators explored and documented, having regard to current airline fleet plans. In combination with the forecasts already generated, this information allowed us to use RDC's Aviation's APEX model to review the commercial viability of different PSO specifications and route options.
- 3.9 Each short-listed enhancement option thus considered then subjected to an indicative economic impact assessment, highlighting potential job creation or losses, user benefits and annual GVA in order to permit Value for Money (VFM) considerations to be brought into play when evaluating projected levels of subsidy required.
- 3.10 Finally, the PSO and new route options were subjected to a qualitative review of their relative merits using a Stage 1 WeITAG appraisal methodology. Cost estimates regarding changing the length of the operational day and potentially constructing a hangar in Anglesey were also prepared.
- 3.11 The key results from all this analysis are summarised in the tables in the results section that follows.

Summary of Key Results

Forecasts Associated with PSO Route Service Enhancements

- 3.12 The forecast period for the PSO service enhancement options was the period 2017-2022, and made the core assumption that Cardiff retained the based aircraft. The detailed results are shown in an Appendix to the PSO Extension Report but a synopsis of the most realistic combinations (i.e a longer day and larger aircraft; access to GDS and enhanced marketing; and a third rotation) are summarised in Tables 3 and 4 below.

TABLE 3: PAX FORECASTS UNDER VARIOUS PSO SERVICE ENHANCEMENTS

Option Assumptions	Fares*	2015 Pax	2018 Pax	2022 Pax
Baseline Forecasts	High Fare Low Fare	11,000	10,631 11,701	11,173 13,464
2x Daily, Weekdays				
With Longer Day & 31 Seat Aircraft	High Fare Low Fare	11,000	12,281 12,742	12,945 14,593
As above, with GDS and Marketing	High Fare Low Fare	11,000	14,938 15,667	15,738 17,958
3x Daily, Weekdays				
With Longer Day but 19 Seat Aircraft	High Fare Low Fare	11,000	13,183 13,899	13,854 15,819
As above, with GDS and Marketing	High Fare Low Fare	11,000	15,841 16,824	16,648 19,185

Source: Consultants analysis

TABLE 4: PAX FORECASTS UNDER VARIOUS PSO SERVICE SCENARIOS

Option Assumptions	Fares	2018 Pax	Load Factor %	2022 Pax	Load Factor (%)
Baseline Forecasts 19 Seat Aircraft*	High Fare	10,631	54.9	11,173	57.7
	Low Fare	11,701	60.4	13,464	69.5
2x Daily, Weekdays					
With Longer Day & 31 Seat Aircraft**	High Fare	12,281	38.8	12,945	40.9
	Low Fare	12,742	40.3	14,593	46.1
As above, with GDS and Marketing	High Fare	14,938	47.2	15,738	49.8
	Low Fare	15,667	49.5	17,958	56.8
3x Daily, Weekdays					
With Longer Day but 19 Seat Aircraft***	High Fare	13,183	45.3	13,854	47.7
	Low Fare	13,899	47.8	15,819	54.4
As above, with GDS and Marketing	High Fare	15,841	54.5	16,648	57.3
	Low Fare	16,824	57.9	19,185	66.0

Source: Consultants Analysis

Notes: * Capacity/Per annum = 19,380 seats

** Capacity/Per annum = 31,620 seats

*** Capacity/Per annum = 29,070 seats

3.13 To give these results some context, it is worth noting that:

- a. The relatively modest growth rates of 1.25% and 1.75% that have been used reflect the fact that that route has been in operation for the best part of nine years and should be seen in the context of Airports Commission 2015 Forecasts which used an average growth of 1.8% per annum between 2010 and 2020 on domestic UK air routes.
- b. Reduced fares have already been tested on the Anglesey route. In 2015 the average fare paid fell from around £45 to £33, which means leisure-oriented fares are likely to have fallen from under £40 to, potentially below £30. Thus, if these lower fares are re-instated (as is assumed in the upper estimates under Do Nothing), the scope for generating additional passengers from further price reductions, while also ensuring that the higher average fare paid by business passengers is protected, is low. Arguably, the main way to grow traffic would be from a longer day, Sunday flights etc.-providing a service at times when people want to travel.
- c. A franchise arrangement would increase visibility of the route on the internet e.g. on Flybe's website. However, the range of connecting flights at Cardiff is not extensive and many are at times/days that do not fit well with the PSO schedule.

- d. Increased visibility on GDS (Global Distribution System of the travel trade e.g. Amadeus, Sabre) is unlikely to transform the commercial prospects for the route, because many of the biggest business users are probably already aware of it. But its enhanced presence in this specialist enhanced area would certainly help bring the route to the attention of the travel agency and tourism markets, and might help to stimulate some premium leisure demand.

3.14 In their March 2015 study, Arup forecasted 13,000 passengers would use the route in 2018 based on a 19-seater aircraft operation; their principal variation was use of a larger aircraft which they predicted would result in 18,000 users in the same year. Whilst the tables show these figures to be within the range of our own forecasts, we are sceptical that their assumption that a single variant (aircraft size) could result in such a substantial differentiation in outcomes unless supported other variations designed to help stimulate demand (e.g. heavy discounting) in response to available capacity.

3.15 Some combinations of variations in these forecasts (e.g. reduced fares, longer operating day, Sunday rotation and having a franchisee on the route) result in passenger volumes greater than Arup's forecast for a 19-seat plane and some of the variations lead to more than 16,000 passengers per year towards the end of the forecast period. This equates to average load factors well in excess of 80% - compared to the current 60% - indicating that a larger plane would ultimately be required.

Forecasts for Possible Network Extensions (Combined with PSO)

3.16 These are set out in Table 5 and 6 below, which conclude with a column providing an overall route evaluation based on the market analysis undertaken and the demand and load factors projected. The table includes a number of route options that look attractive from both Anglesey and Cardiff, with links to London and major European hubs looking particularly promising.

TABLE 5: THREE ROTATION OPTIONS

Service Routing	Assumptions	Catchment Leakage	Frequency	Competition	Attractiveness over Alternatives	Assumed Market Penetration	Existing Market Captured	Potential Stimulation	Estimated Total Demand	Seat Capacity	Projected Load Factor	Route Evaluation	Comments
Anglesey Base - 3 Rotations													
VLY - ABZ	19 Seat Aircraft (Potentially via Intermediate Point)	5,889	1	Limited: Long by road/rail; or via MAN	High	60%	3,533	20%	4,240	9,690	43.8%	Poor	Better combined with INV
VLY - INV	19 Seat Aircraft (Potentially via Intermediate Point)	9,460	1	Limited: Long by road/rail; or via MAN	High	60%	5,676	20%	6,811	9,690	70.3%	Promising	Better combined with ABZ
VLY - BHD	19 Seat Aircraft (Potentially via Intermediate Point e.g. IOM)	10,715	1	Surface by Ferry via Dublin; or via LIV + MAN	Modest	50%	5,358	20%	6,429	9,690	66.3%	Possible	Drop-in to IoM merits investigation
VLY - London	19 Seat Aircraft (Direct to LUT or NHT)	18,000	1	Surface by road/rail +4hr; or via MAN to LHR - others not served	Modest	40%	7,200	10%	7,920	9,690	81.7%	Good	Depend on Airport + price
VLY - London	31 Seat Aircraft (Direct to LUT or NHT)	18,000	1	Surface by road/rail +4hr; or via MAN to LHR - others not served	Modest	45%	8,100	15%	9,315	15,810	58.9%	Modest	19 seater better until day rtn can be offered
Cardiff Base - 3 Rotations													
Extra Paris	31 Seat Aircraft (Direct to CDG)	24,000	1	Long surface journey; or via BRS/London. Adds second rotation.	Modest	50%	12,000	30%	15,600	22,135	70.5%	Promising	Need code share to work
Frankfurt	31 Seat Aircraft (Direct to FKT)	36,405	1	Long surface journey; or via London.	High	60%	21,843	20%	26,212	22,135	118.4%	Very Good	Strong option even for bigger aircraft
ABZ and INV	31 Seat Aircraft (Direct); ABZ 3/pw, INV 4/pw	16,937	1	Long surface journey; or via BRS/London.	Modest	50%	8,469	25%	10,586	22,135	47.8%	Poor	Market too small for +29 seats
ORK and SNN	31 Seat Aircraft (Direct); ORK 4/pw, SNN 3/pw	15,600	1	Long journey by ferry or via BRS/London. Restores established market; access US	Modest	50%	7,800	50%	11,700	22,135	52.9%	Modest	Might be better seasonal only

Coding: ABZ – Aberdeen; INV – Inverness; BHD – Belfast City Airport; ORK – Cork; SNN – Shannon; VLY - Anglesey

TABLE 6: FOUR ROTATION OPTIONS

Service Routing	Assumptions	Catchment Leakage	Frequency	Competition	Attractiveness over Alternatives	Assumed Market Penetration	Existing Market Captured	Potential Stimulation	Estimated Total Demand	Seat Capacity	Projected Load Factor	Route Evaluation	Comments
Anglesey Base - 4 Rotations (Assumes longer opening hours at VLY can be secured)													
VLY - NHT for London	31 Seat Aircraft (Direct to NHT for LHR)	36,310	2	Surface by road/rail +4hr; or via MAN to LHR - others not served	High	60%	21,786	40%	30,500	31,620	96.5%	Very Strong	Offering day return and NHT crucial
VLY: x1 London + x1 EDI	31 Seat Aircraft (Direct for both services 5 days per week)	23,625	2	Surface by road/rail 3hr to LHR; or via BRS/LHR for EDI	Slight	50%	11,813	45%	17,128	31,620	54.2%	Modest	Would work better with 19 seats. But more ops risk as aircraft slower
VLY: x1 London + x1 ABZ/INV	31 Seat Aircraft (Direct for both services 5 days per week)	26,500	2	to LHR, Long to ABZ/INV; or via BRS/LHR for EDI	Modest	50%	13,250	40%	18,550	31,620	58.7%	Modest	Would work better with 19 seats. But more ops risk as aircraft slower
VLY: x1 BHD + x1 ABZ/INV	31 Seat Aircraft (Direct to NHT for LHR)	19,500	2	drive by road/rail, Long to ABZ/INV; or via BRS/LHR for all.	High	60%	11,700	35%	15,795	31,620	50.0%	Modest	Would work better with 19 seats. But more ops risk as aircraft slower
CWL Base - 4 Rotations													
CWL - London City	31 Seat Aircraft (Direct to NHT for LHR)	38,000	2	Surface by road/rail 3hr	Modest	50%	19,000	28%	24,320	37,945	64.1%	Possible	Costs at LCY means high fare & business only
CWL:Frankfurt and Norwich (Drop-in)	31 Seat Aircraft (Direct to NHT for LHR)	46,000	2	Surface by road/rail +5hr or FT via London	High	55%	25,300	30%	32,890	44,270	74.3%	Promising	NWI drop-in enroute to FKT merits further investigation.
CWL: Brussels and ABZ/INV	31 Seat Aircraft (Direct to NHT for LHR)	25,000	2	Surface by road/rail +6hr or via BRS	High	55%	13,750	40%	19,250	44,270	43.5%	Poor	Needs 19 seat; but even so better prospects elsewhere

Coding: NHT – Northolt; EDI - Edinburgh

APEX Commercial Analysis

Network Enhancement Services from Anglesey

3.17 The tables that follow capture outputs from the Apex model and thus offer insights into the indicative commercial performance of certain aircraft on a number of the most promising routes from the forecasts above. The most promising PSO enhancement options from Anglesey Airport would be a service to London – in this case, Luton was used to exemplify a generic London Airport, but others might equally be possible. The Initial PSO Enhancement Study particularly identified RAF Northolt as a possible London terminus for small regional aircraft because it offers relatively quick road connections by shuttle bus to Heathrow or access by heavy rail or tube into London (see Table 7).

TABLE 7 ANGLESEY TO LONDON

Anglesey Extension Routes	VLY-London	VLY-London	VLY-London	VLY-London
Aircraft (Seats)	DHC6-300 (19)	Dornier 328-100 (31)	DHC6-300 (19)	Dornier 328-100 (31)
Origin	Anglesey Airport	Anglesey Airport	Anglesey Airport	Anglesey Airport
Destination	London Luton Airport	London Luton Airport	London Luton Airport	London Luton Airport
Airline	Generic	Generic	Generic	Generic
Aircraft	DHC6-300	Dornier 328-100	DHC6-300	Dornier 328-100
Load Factor (%)	55	60	95	80
Total Pax	5,434	9,672	18,808	25,842
Average Fare	90	90	90	90
Frequency (wk)	5	5	10	10
Revenue (£)	500,020.21	893,239.48	173,0664.36	2,386,552.67
Costs (£)	819,718.41	856,950.16	170,8112.62	1,771,303.75
Route Profit/ Loss (£)	(-319,698.2)	+36,289.32	+22,551.74	+615,248.92

The idea of introducing small commercial passenger aircraft to Northolt, alongside the commercial business jets it already accommodates in addition to its military and VIP traffic, is a concept Flybe amongst others have been pressing with Government in order to improve regional air access to both London and Heathrow. Northolt is ideally suited to the kind of small aircraft that we have envisaged on this route and the charges should not be dissimilar to Luton or Stansted. The big stumbling block at the moment is MoD resistance to consider a change of use from the current business jet focused operation at Northolt, but this may be something the Welsh Government may be well placed to take up with MoD Ministers or via contacts at RAF Valley. We speculate that a service between RAF Valley and RAF Northolt may prove popular with military personnel as well as with other users.

TABLE 8: APEX PAX ESTIMATES VS LEAKAGE BASED FORECASTS

Aircraft	Route	Estimated	APEX
19 Seat Aircraft (Direct to LTN ¹² or NHT)	VLY - London 1/day	7,920	6,916
31 Seat Aircraft (Direct to LTN or NHT)	VLY - London 1/day	9,315	11,284
31 Seat Aircraft (Direct to NHT for LHR ¹³)	VLY - NHT for London 2/day	30,500	25,842
19 Seat Aircraft (Potentially via Intermediate Point)	VLY - INV 1/day	6,811	6,916
19 Seat Aircraft (Potentially via Intermediate Point e.g. IOM ¹⁴)	VLY - BHD 1/day	6,429	8,866

3.18 Table 8 compares the forecast for the route in Tables 5 and 6, with the level of demand APEX calculates would be needed to produce a breakeven operation, and as can be seen the two are closely matched for a single 19 seat aircraft rotation and about 20% higher than forecast for a 31-seat aircraft flying a single daily rotation. This is because it will be the ability to do a day's business and return that will be the key to capturing a significant share of the traffic currently travelling from North West Wales to Heathrow by road, rail or air from Manchester. Hence it is projected that the double daily service using a 31-seat aircraft would be over-subscribed relative to APEX breakeven passenger throughput, based on an average one-way fare of £90 and a lead in of probably closer to £49. This level of fare stands scrutiny against typical single journey costs by road or rail in Table 9.

¹² London Luton

¹³ London Heathrow

¹⁴ Isle of Man

TABLE 9: SINGLE JOURNEY COSTS TO TARGET DESTINATIONS FROM BANGOR

Bangor to	Rail Cost (Tomorrow at 0700)	Rail Cost 30 days hence off peak	Rail Cost 60 days hence off peak	Time	Distance by road	Car @ £0.45p /mile	Time
London Kings Cross	£161	£94	£88	3h 40m	264	£119	5h 01m
Aberdeen	£150	£150	£150	7h 30m	427	£192	7h 02m
Inverness	£156	£156	£156	9h 00m	452	£203	7h 32m
Edinburgh	£117	£117	£117	5h 00m	298	£134	5h 12m
Glasgow	£122	£40	£47	5h 07m	294	£132	4h 42m
Belfast (via Holyhead ferry)	£49	£49	£49	7h 40m	198	£89	5h 09m

3.19 When similar comparisons are made for prospective routes from Anglesey Airport (VLY) to Belfast and Inverness in Table 10 using a 19-seat aircraft, the results are similarly positive, although it would appear the assumed fare in APEX of £80 to Belfast would need either to be higher to breakeven if volumes remained restricted or lowered to increase market stimulation and generate additional users. The 31 seat aircraft economics was also explored with profit being possible only at higher load factors and fares. At the moment, that service would make a material loss and the Inverness service only works when close to double the predicted traffic on the VLY-INV route is projected, and this seems unlikely.

TABLE 10: ANGLESEY TO OTHER UK DESTINATIONS

Anglesey Extension Routes	VLY-BHD	VLY-BHD	VLY-INV	VLY-INV
Aircraft (Seats)	Dornier 328-100 (31)	DHC6-300 (19)	DHC6-300 (19)	Dornier 328-100 (31)
Origin	Anglesey Airport	Anglesey Airport	Anglesey Airport	Anglesey Airport
Destination	Belfast City Airport	Belfast City Airport	Inverness Airport	Inverness Airport
Airline	Generic	Generic	Generic	Generic
Aircraft	Dornier 328-100	DHC6-300	DHC6-300	Dornier 328-100
Load Factor (%)	55	68	70	70
Total Pax	8,866	6,718	6,916	11,284
Average Fare	80	80	100	100
Frequency (wk)	5	5	5	5
Revenue (£)	720,716.37	544,900.13	712,401.74	1,167,996.29
Costs (£)	835,323.02	713,455.73	1,118,570.04	1,108,115.44
Route Profit/ Loss (£)	(-114,606.65)	(-168,555.6)	(-406,168.3)	+59,880.85

- 3.20 A single daily service from Anglesey to Amsterdam using a 31-seat aircraft in the middle of the day was considered (see Table 11). CAA data suggests that 19,425 passengers from Anglesey Airport's catchment area are already flying to Amsterdam each year (and that figure excludes those using Liverpool and so more realistically likely well over 20,000. Assuming 40% of these would switch to using a new Anglesey service and that the existence of the route would result in traffic stimulation of 50%, then nearly 11,700 passengers are projected to use the service. This is higher than the projected requirement by APEX based on a £120 one-way fare.

TABLE 11 ANGLESEY TO AN INTERNATIONAL HUB AIRPORT

Anglesey Extension Routes	VLY-AMS
Aircraft Seats	Dornier 328-100 (31)
Origin	Anglesey Airport
Destination	Amsterdam - Schiphol Airport
Airline	Generic
Aircraft	Dornier 328-100
Load Factor (%)	65
Total Pax	10478
Average Fare	120
Frequency (wk)	5
Revenue (£)	1,306,075.73
Costs (£)	1,263,450.24
Route Profit/ Loss (£)	+42,625.49

- 3.21 All of which points to a single daily Amsterdam service being an interesting one to consider alongside a London link, although with slots becoming scarce at Amsterdam as well as Heathrow, whether a 31-seat aircraft from a small market would be given priority at acceptable cost to gain access to Schiphol is unclear. However, Dundee Airport's service to Amsterdam, which achieved particularly good sales until it was temporarily switched to Edinburgh for operational reasons, provides a positive precedent.

Economic Impact Assessment

3.22 The indicative economic impacts of the service variants on the PSO Route and new route enhancement options are provided in the next two tables.

TABLE 12: IMPACTS OF THE PSO SERVICE VARIANT OPTIONS

Option Assumptions	Fares*	2015 Pax	2022 Pax	Incremental Pax by 2022	Estimated Direct Jobs	Indirect + Induced Jobs	Total Jobs Created	% Business Pax	Travel Cost Saving per Business Pax (£)	Time Savings per Pax (hrs)	Cost Saving pa - Air vs Road (£)	User Benefits (£)	GVA Per Year (£)
Baseline Forecasts	High Fare	11,000	11,173	173	0.2	0.3	0.5	78%	45	2	6,067	6,742	6,405
	Low Fare		13,464	2,464	3.0	3.6	6.6	68%	55	2	92,142	83,765	87,954
2x Daily, Weekdays													
With Longer Day & 31 Seat Aircraft	High Fare	11,000	12,945	1,945	2.3	2.8	5.2	78%	45	2	68,266	75,852	72,059
	Low Fare		14,593	3,593	4.3	5.2	9.6	68%	55	2	134,360	122,146	128,253
As above, with GDS and Marketing	High Fare	11,000	15,738	4,738	5.7	6.9	12.6	78%	45	2	166,308	184,787	175,548
	Low Fare		17,958	6,958	8.4	10.2	18.5	68%	55	2	260,246	236,587	248,416
3x Daily, Weekdays													
With Longer Day but 19 Seat Aircraft	High Fare	11,000	13,854	2,854	3.4	4.2	7.6	78%	45	2	100,188	111,320	105,754
	Low Fare		15,819	4,819	5.8	7.0	12.8	68%	55	2	180,246	163,860	172,053
As above, with GDS and Marketing	High Fare	11,000	16,648	5,648	6.8	8.2	15.0	78%	45	2	198,230	220,255	209,242
	Low Fare		19,185	8,185	9.8	12.0	21.8	68%	55	2	306,132	278,302	292,217

TABLE 13: ECONOMIC IMPACTS OF THE POTENTIAL EXTENSION ROUTES

Service Routing	Estimated Total Demand	Estimate of Generated Traffic	Projected Load Factor	Route Commercial Evaluation	Estimated Direct Jobs	Indirect + Induced Jobs	Total Jobs Created	% Business Pax	Travel Cost Saving per Business Pax (£)	Time Savings per Pax (hrs)	Cost Saving pa - Air vs Road (£)	User Benefits (£)	GVA (£/m)
Anglesey Base - 3 Rotations													
VLY - ABZ (19 seats)	4,240	707	43.8%	Poor	5	7	13	60%	80	4.0	186,564	443,088	0.630
VLY - INV (19 seats)	6,811	1,135	70.3%	Promising	8	12	20	30%	80	5.0	149,846	444,857	0.595
VLY - BHD (19 seats)	6,429	1,072	66.3%	Possible	8	11	19	35%	140	6.0	288,769	587,852	0.877
VLY - NHT (19 seats)	7,920	720	81.7%	Good	10	14	23	45%	20	2.0	68,040	323,190	0.391
VLY - NHT (31 Seats)	9,315	1,215	58.9%	Modest	11	16	27	45%	20	2.0	78,368	372,246	0.451
Cardiff Base - 3 Rotations (All 31 seats)													
Extra CDG	15,600	3,600	70.5%	Promising	19	27	46	40%	120	6.0	662,400	1,821,600	2.484
FRA	26,212	4,369	118.4%	Very Good	31	46	77	65%	210	10.0	3,279,699	8,589,688	11.869
ABZ and INV	10,586	2,117	47.8%	Poor	13	19	31	40%	115	5.5	438,248	995,585	1.434
ORK and SNN	11,700	3,900	52.9%	Modest	14	20	35	20%	95	6.0	185,250	643,500	0.829
Anglesey Base - 4 Rotations (Assumes longer opening hours at VLY and all 31 seats)													
VLY - NHT x2	30,500	8,714	96.5%	Very Strong	37	53	90	60%	30	2.0	470,581	1,490,174	1.961
VLY - NHT x1 + EDI x1	17,128	5,316	54.2%	Modest	21	30	51	60%	50	3.5	434,104	1,443,395	1.877
VLY - NHT x1 + ABZ/INV x1	18,550	5,300	58.7%	Modest	22	32	55	65%	50	4.5	516,750	2,209,106	2.726
VLY - BHD x1 + ABZ/INV x1	15,795	4,095	50.0%	Modest	19	28	47	45%	110	5.5	680,501	1,616,190	2.297
CWL Base - 4 Rotations (All 31 seats)													
CWL - LCY x 2	24,320	5,320	64.1%	Possible	29	43	72	75%	0	2.5	0	1,929,094	1.929
CWL - FRA + NWI (Drop-in) x 2	32,890	7,590	74.3%	Promising	39	58	97	60%	130	7.5	2,269,410	7,201,013	9.470
CWL - BRU + ABZ/INV x 2	19,250	5,500	43.5%	Poor	23	34	57	60%	100	5.5	990,000	2,994,750	3.985

- 3.23 The results suggest that the enhancements to the existing PSO service generate only small incremental economic benefits, but that some of the 'extension' routes using the PSO aircrafts down time could be very positive in terms of economic returns for any support provided, with Frankfurt substantially ahead of the others because of distance, but London and Amsterdam also demonstrating potentially material benefits.

Qualitative Appraisal of Long List

- 3.24 The non-quantified qualitative impacts arising from this appraisal chapter, and used to generate the WelTAG tables in the next, are summarised for convenience below in Table 14 for network enhancements from Anglesey and Table 15 for network enhancement options from Cardiff Airport.

TABLE 14: SUMMARY OF IMPACTS OF POSSIBLE AIR SERVICE NETWORK ENHANCEMENTS FROM ANGLESEY

Type of Enhancement	Impact	Intensity of Impact
Better PSO timetable	Improved popularity with Welsh residents and more productive trips possible	+
More capacity on PSO route	Will diversify usage with a presumed wider range of fares. Will also prove more useful for inbound tourism promotion from South Wales	+
Anglesey based Aircraft		
Double daily link with Northolt	Would be transformative in globalising the region and making it more accessible to a range of other long haul countries and the important London market. A smooth interchange with LHR would be imperative.	+++
Daily or double daily link with other London Airport	Would be transformative in raising the profile of the region in the EU and making it more accessible to a range of other destinations that also link with that London airport – even with self-connecting, and also the important London market	+ OR ++
Links with new British Isles Destinations	The Scottish market would be important for the Energy Island – Irish destinations which all offer different business and tourism opportunities - the Crown Protectorates would have less business impact	+ OR ++
Cardiff Based aircraft		
Enhanced connections at Cardiff	North Wales could also benefit from any onward connections at Cardiff if the same aircraft was used and if the timetabling was reasonably seamless. Conversely new destinations could more seamlessly access North Wales for short breaks via Cardiff.	+ OR ++

Note Plus signs (+ + +) indicate Intensity of impact with minus sign (-) indicating little or neutral.

TABLE 15: SUMMARY OF IMPACTS OF POTENTIAL AIR SERVICE NETWORK ENHANCEMENTS FROM CARDIFF AIRPORT

Type of Enhancement	Impact	Intensity of Impact
Better PSO timetable	Improved popularity with N Welsh residents. Less beneficial to Cardiff catchment	-
More capacity on PSO route	Will diversify usage with a presumed wider range of fares	+
Cardiff Based aircraft		
Double daily to LCY	This would be particularly welcome for the Financial sector, and there are a range of onward destinations at LCY that would also be of interest	+++
Additional frequency to Paris	This would facilitate business in both Paris and its substantial range of onward connections	+++
Once / day to Frankfurt	A welcome addition to Wales destination board and possible Norwich elaboration might also be welcome	++
North of Scotland	Potential to serve Inverness, improve links to Aberdeen and perhaps use intermediary stops such as LBA or NCL could all have utility	++
Southern Ireland	Cork and Shannon would be useful destinations to reassert at Cardiff	++
Channel Isles	Strengthening links with the Channel Isles would be welcome, but not particularly transformative	+
Cardiff enhancements	Some of these near Europe, Irish, Channel Isle and Norwich enhancements would be of interest to Anglesey catchment and would drive some through traffic	+
Anglesey based Aircraft		
Links with new British Isles Destinations	New Links to Inverness, Belfast, and IOM might be of utility to the Cardiff catchment	++

Conclusions and Recommendations from the Route Extension Study

- 3.25 Whatever mix of potential delivery mechanisms is employed to optimise PSO associated route network enhancements, it is clear from our analysis and the appraisal that a key decision is going to be whether those enhancements will have a North or South Wales centric complexion. There are also trade-offs to be made between additional capital costs in Anglesey, the need for a bigger PSO aircraft if Cardiff is to benefit and the distribution of connectivity benefits at either end of the route.
- 3.26 However, the decision on this does not need to be made immediately as several important preparatory building blocks need laid in the meantime. Ideally the development of some sort of consensual political will for a project that straddles political cycles; identification of budgets; the key role that RAF will play in this, the availability of Northolt for scheduled flights and further investigation as to suitable state aid facilitation measures still need to be undertaken.
- 3.27 Summarising the recommendations made in the Technical Report we suggested the following milestone steps were actioned:
- i. Prepare current PSO Invitation to Tender (ITT) assuming CWL based aircraft. Leave room for elaboration before or during PSO (e.g. change in operating hours). Find a way to turbo charge route marketing to ensure patronage grows, as this reduces risk and cost on subsequent elaborations.
 - ii. Commence dialogue with the RAF/DIO to discuss:
 - Longer weekly opening hours;
 - Possible weekend opening, even if only for occasional special 'charters';
 - Potential to base aircraft in Anglesey and implications (e.g. hangar and larger enclave footprint);
 - NASP adaptations and timescales;
 - Cost.
 - iii. Complete a more detailed assessment of NASP in parallel with these discussions; quantify cost, obtain quote for equipment, agree with RAF and establish timescales.
 - iv. Undertake socio economic studies to see if PSOs from VLY-London and or Amsterdam can be justified, and similarly appropriate forms of route support for an additional daily frequency to Paris or new routes to London or Frankfurt can be justified/maintained. This will require more detailed work, including potentially visitor surveys, to be undertaken on the North-West Wales tourism market so the potential benefits of enhanced connectivity can be properly understood and assessed.
 - v. The most promising London option for both Anglesey (and possibly Cardiff) until the third runway is built at Heathrow, is a service to RAF Northolt, and the Welsh Government should attempt to negotiate an agreement with the MoD to facilitate this.

- vi. In tandem, it would be appropriate to draft, and then seek approval on a Welsh RDF¹⁵ scheme, which can be used both on PSO route enhancements and other route enhancements at CWL and VLY.
- vii. In the autumn of 2016¹⁶ award a PSO contract until end 2020. Ideally this will include a 2018 break clause if the operator is not willing to contemplate aircraft upgrades or other route opportunities. Subsequently it has been agreed with the Welsh Government that it would be better to seek a temporary extension to the existing contract to allow proper planning for a new PSO contract in 2018.
- viii. This makes it important that the extra time available is used for careful planning of the re-tender and for considerations such as infrastructure preparations (e.g. the hangar, requisite car park and road re-alignments improvements to permit basing of an aircraft in Valley largely using the current civilian footprint) to be addressed.
- ix. It is also important that the Welsh Government takes time to confer with CWL and air operators on various route options and available state aid before the new tender is published.
- x. This in turn will help to refine the final PSO ITT which ideally should be published at least one year before start date. This additional time will be used to better evaluate the various enhancement options; tie down the bidders into some sort of credible commitments on their additional route development initiatives, and allow time to launch any new routes with a better chance of success.
- xi. Shortly after award of the 2018 PSO we would recommend that preparations begin on the subsequent PSO, which ideally will be building on the work of the previous 6/7 years.
- xii. Whichever company is appointed as PSO operator, it must be obliged to develop a comprehensive marketing plan for not only the PSO route but also any enhancements, which is shared and bought into by relevant partners and properly funded in order to make a substantive impact.

3.28 In addition to the above, we also offered a series of other more detailed recommendations that were more tactical in nature:

- a) Ensure that the DfT and the new runway sponsor (LHR in all likelihood) are clear that Wales expects to have slots for both Cardiff and Anglesey Airports when any additional runway capacity becomes available. Flag that the expectation is that these will be protected by PSOs.

¹⁵ Route Development Fund is an EU state Aid approved category of route support under specified circumstances and principles

¹⁶ Please note during the authoring of the various reports the timetable of possible PSO commencement dates evolves. These dates should be considered as illustrative rather than definitive.

- b) Express support to the DfT for the use of Northolt as an interim measure whilst new runway capacity is made available. This is likely to be of more interest from Anglesey than from Cardiff because of its shorter terrestrial access times.
- c) Review with the RAF/DIO whether the JSP360 funding model works best for the Anglesey Airport civilian enclave. For instance, a fixed annual fee rather than JSP360 discounted fee might work better. There is concern that additional civilian business that could be attracted to the airport by the marketing efforts of the national and regional stakeholders would solely benefit the RAF. This does not seem fair, and does not incentivise various bodies to optimise the economic and tourist potential of the civil side of the airport (which they are funding). Additional charters using the PSO aircraft, business and general aviation, IT¹⁷ charters and limited weekend opening in the meantime should also be explored.
- d) United and Coordinated Stakeholder Action for instance in Marketing - Air operators prefer to work with a united and coordinated group of stakeholders when launching and developing their route. They also prefer to be able to negotiate with one representative of the region rather than several different agencies. The Irish and Scottish Government approaches to route support offers a model, and in regional France they often have a Syndicate Mix with a President, (usually advised by the local airport) who is empowered to make deals with the airline.
- e) The ITT and PSO contract terms will be very important in ensuring WG aims are well aligned with air operator aims. Some examples were provided in the conclusions of the 2016 *Demand Forecasting, Economic Analysis and Exploring Extending the Aircraft Size and Operating Hours at Anglesey Airport* report.
- f) Innovation - It is recommended that options are introduced into the tender competition so that different operator solutions are encouraged and can be compared against the PSO programme aims. The Invitation to Tender can invite operators to offer other solutions that fulfil the programme aims by means unanticipated in the specifications. The Government should retain the flexibility to entertain novel solutions.
- g) More than six months' notice - The PSO regulations (Regulation No. 1008/2008) require procuring authorities to give 'at least' six months' notice of intention to award a PSO. Nearly all have interpreted this in practice to mean (invariably) six months. For the complexity of marrying a PSO with other enhancements being considered here we would strongly recommend that WG offer more like 12 months on their ITT. This permits proper preparation, pre-marketing, smooth handover and thorough preparation and pre-marking of any additional routes. The aim should be to award the PSO contract at least three months before start date.
- h) Use trialling to avoid re-tendering - If there is a desire to change the specification of a PSO during the term of the contract this can only be properly achieved with a full re-tender. However minor anticipated changes can be covered by trials, which can be periodically reviewed and dropped if unsuccessful. We would recommend that many

¹⁷Inclusive Travel such as Package Holidays

aspects (such as yield maximisation experiments, even timetable details) are presented as trials that can be tweaked without triggering a full re-tender.

- i) Test Options and anticipated different solutions - It may well be that the tendering process itself presents different route enhancement options for selection by the Welsh Government. The Welsh Government cannot micro-manage the desired route initiatives and it should also be noted that different operators will have differing analysis and different assessment of operational convenience.
- j) PSO incentives - Some PSO contracts, because of their deficit funding clauses, can create poor incentives to develop the route or assign adequate resources to marketing. In other words, any improvement in the route revenue will be used to reduce the subsidy, and not benefit the airline¹⁸. Authorities are increasingly addressing this contractual anomaly.
- k) PSO Route Development Plan - A persuasive route development plan that explains how route revenues can be developed and patronage can be increased should be encouraged and rewarded in the assessment of tender bids, and these efforts should be reflected in year on year passenger and revenue growth projections, and targets presented in the submission.
- l) The Maximum Fare tool is a rather blunt instrument to ensure affordability and maximum participation. The airline and sponsoring authority will have different ambitions with regard to average yield and numbers travelling and clear guidance and influence should be applied to the pricing policy, which as we appreciate from the route forecasting can result in very different numbers travelling.
- m) PSO proposal Evaluation Criteria. According to the regulation the subsidy requested is only to be a main and not the only determinant of the preferred bidder. Other criteria can be developed to reward solutions that better suit the wider strategic objectives of the Welsh Government.
- n) Conceptualise a progressive range of enhancement steps and timetable that can be committed to, and then monitored, particularly against key milestones (e.g. increases in route patronage, NASP quantified, RAF quantified, PSOs/RDFs delineated, stakeholders jointly committed).

3.29 Based on the foregoing the immediate next steps can be summarised as follows:

- Create (possibly consult on) a formal exposition of the PSO programme aims, which then can act as a reference point for much subsequent action.
- Enter dialogue with RAF/DIO on a range of enhancement possibilities.

¹⁸ **Merkert, R. and O'Fee, B. (2013)** Efficient procurement of public air services - Lessons learned from European transport authorities' perspectives, Transport Policy (June 2013)

- Finalise the current ITT with whatever simple enhancements can be incorporated within the pressing timescale – we suggest:
 - Extended day if agreeable with RAF within the timescale and budget of Department
 - Enhanced and better resourced marketing
 - Incentives for the air operator to cooperate in that marketing
 - Consideration on how best to positively influence the yield management policy to broaden participation in service usage
 - Pre-agree some additional 'PSO' weekend schedules at outset of each year (e.g. Rugby, Football, TT races, Christmas shopping, stand out events)
 - Positively score any voluntary route enhancements by the bidders

3.30 The conclusions and recommendations have been encompassed within the Recommendations and Next Steps in Section 10 of this report.

4 THIN ROUTE DEVELOPMENT OPTIONS FROM CARDIFF INTERNATIONAL AIRPORT

- 4.1 As there was a significant amount of overlap between the draft work already undertaken on a *Cardiff Airport: PSO Thin Routes* and the *Welsh PSO route enhancement study* (see *Table 1*); it was proposed that the outputs of both studies might usefully be combined in one more comprehensive exercise identifying short haul routes that are likely to require Welsh Government intervention if they are to be secured and consolidated over the next 3-5 years.
- 4.2 The PSO work explored routes that it might be possible to serve with aircraft in the 19-34 seat category as an adjunct to the core PSO service; this Thin Route study focused on routes to and from Cardiff (CWL) of 50,000 passengers a year or less, and therefore less likely to be commercially viable on a free-standing basis than those with a potential market larger than that. The report used an equivalent appraisal to ease comparison with PSO enhancement options.
- 4.3 Using a similar approach to the prior PSO enhancement study the study team were not constrained by having to use the 'Anglesey' PSO aircraft and were also seeking routes that could survive on a basis other than a PSO e.g. normal route development incentives and Route Development Funds.
- 4.4 Demand was estimated from catchment leakage as derived from CAA passenger surveys and commercial viability was tested using APEX modelling as before.
- 4.5 A range of routes were identified and scored based upon quantitative and qualitative criteria. Some key issues include fares vs surface modes or competitiveness vs Bristol fares. Both studies were concerned with state aid interventions; that are legal and capable of contributing substantively to route development.
- 4.6 The study concludes that there are between 10-15 worthwhile route development opportunities from Cardiff that are not outbound leisure orientated (there is probably another 10-15 of these as well), which a mixture of RDF and DMF¹⁹ funding could help to support and for which there is potentially an economic case to do so. Further work is needed to develop a methodology that will satisfy green book requirements²⁰ and allow value for money to be demonstrated, but the core work to justify commissioning a more in-depth evaluation of that kind, covering Cardiff as well as Anglesey, is provided by the analysis in this report and the accompanying PSO extension study.
- 4.7 This report considers five facilitative mechanisms which could play a role in route development:

¹⁹ Destination Marketing Funds are a common way that public funds support key routes within specified limits.

²⁰ HM Treasury guidance for public sector bodies on how to appraise proposals before committing funds to a policy, programme or project

- i. Public Service Obligations (PSOs);
- ii. EU approved state or locally sponsored Route Development Funds;
- iii. Destination marketing initiatives;
- iv. De-minimis funding; and
- v. Normal airport funded route support packages.

Summary of Thin Route Study Review

TABLE 16: THIN ROUTE APPRAISAL IDENTIFIED 10-15 POSSIBLE ROUTE INITIATIVES

	Frequency of rotations / week	Benefit to Wales PLC	Likelihood of Delivery	Delivery Mechanism
United Kingdom				
Norwich Airport	5 / week twinned with near Europe	✓	✓	RDF
Aberdeen Airport	3/6 week & enhance current service	✓✓	Significant doubt	normal route dev
Inverness Airport	3/5/6 week	✓	✓	RDF
Leeds/Bradford	4/5 twinned with Scotland?	✓	Significant doubt	RDF
London City	10 (not modelled)	✓✓	✓	PSO
Crown Dependencies				
Isle of Man Airport	3 shared with Guernsey	✓	✓	normal route dev
Guernsey Airport	3/week	Minor or neutral	✓	normal route dev
S Ireland				
Cork Airport	5/6 or shared	✓✓	✓✓	normal route dev
Shannon Airport	3/week	✓	✓	RDF
Near Europe				
Paris - CDG Airport	5 in addition to current	✓✓✓	✓✓	PSO
Brussels Airport	4/5 week	✓✓	✓	RDF
Berlin - Schoenefeld	2 shared	✓	✓	RDF
Zurich Airport	2 shared	✓	✓	RDF
Hamburg Airport	4/5 week	✓✓	✓	RDF
Frankfurt Airport	5/6 week	✓✓✓	✓✓	RDF
Frankfurt Airport	10 (slots?)	✓✓✓	Significant doubt	PSO / RDF
Geneva Airport	3/week	✓	✓	RDF
Oslo Airport	1/week	✓	Significant doubt	RDF
Toulouse - Blagnac	4 / week	✓✓✓	✓✓	RDF
Bordeaux Airport	2 shared	✓	✓	RDF
Far Europe				
Milan - Linate Airport	3/5 week	✓✓	✓	RDF
Rome - Fiumicino	3/week	✓	✓	RDF

Rome - Fiumicino	5week	✓✓	✓	RDF
Istanbul - Ataturk	3/5 week	✓✓	Significant doubt	RDF
<i>The ✓ scoring symbol indicates strength of assessment and the colour coding is to distinguish the delivery options</i>				

5 EVALUATION OF NASP COMPLIANCE - ANGLESEY AND HAWARDEN AIRPORTS

- 5.1 One of the key components of aviation security within the UK is the National Aviation Security Programme. This is the Government standard that ensures the national requirements, policies and procedures covering all relevant provisions for aviation security within the implementing regulations under UK and EU law, are defined. All aircraft with either a maximum take-off weight (MTOW) of 10,000 kg and/or more than 19 seats are required to come under the provisions of NASP. Additionally, under NASP, a Security Restricted Area (SRA) and/or Critical Part (CP) thereof, must be established at the airport and clearly marked as the defined airside area in which the aircraft to be used, is stationed, and into which all those persons with a legitimate need to access the CP, may do so. This will include screened baggage, passengers, vehicles and staff. Protection of the SRA/CP is the main priority within the provision of NASP. Designation of the SRA/CP will need to be agreed with and approved by the regulator prior to the commencement of any NASP operations.
- 5.2 This report built upon work that indicated options where 19+ seat aircraft could operate out of Anglesey Airport and would therefore have to comply with this more stringent set of security standards.
- 5.3 A 2015 Quelltex report for the Isle of Anglesey County Council (IACC) on potential NASP compliance at Anglesey Airport which built upon an earlier 2009 report by Quelltex on the same topic, were made available to this study. The report was also informed by site visits to Hawarden and Anglesey Airports and discussions with Airbus, APG, Bilfinger Terminal staff and Isles of Anglesey Council.
- 5.4 The study did also undertake visits to other Welsh regional airports, although it was judged unlikely that inclusion under NASP would be required within any likely route enhancement scenario at these other airports.
- 5.5 The report estimated that Anglesey would require an approximate spend of circa £750,000 to become NASP compliant and Hawarden Airport between £1.36m - £2.3m, dependent upon whether a new terminal was required to be built alongside NASP compliance. The APG enclave at Hawarden was acknowledged as the best area to host such a development. In terms of timescales it would be prudent to allow 6-8 months to complete the transition as it requires new equipment to be purchased, staff to be trained, airport operators (RAF and Airbus to cooperate) and regulatory approval to be gained.
- 5.6 The Anglesey c£750k figure is a best estimate for what it would cost to be fully compliant for the change to level 3 for hold baggage screening by Sep 2018. That figure also includes new cabin baggage system which anticipates an imminent change to that requirement. This is what has been done at Newquay Airport for instance to future-proof themselves. Also, this level of equipment will be adequate for well in excess of 60K passengers p.a. as long as there is room for them to queue up. Anecdotally, Newquay

has only one security 'arch' and is expecting to be able to process 400K+ passengers with 2 machines running some of the time.

- 5.7 It may be possible to negotiate removing electronic security completely for a 19 seat Welsh PSO, especially as so few passengers are interlining at Cardiff Airport. Such an arrangement has recently been secured, with CAA approval in Scotland at airports such as Campbeltown, Tiree and Barra flying into Glasgow. Nonetheless until NASP compliance is achieved at Anglesey Airport, it would not be possible for southbound passengers to interline seamlessly as, on arrival from Anglesey, they would need to re-clear security (at Cardiff Airport) in order to continue their onward air travel.

6 AIRCRAFT-RELATED CONSIDERATIONS ASSOCIATED WITH WELSH PSO PROCUREMENT

- 6.1 The study team were asked to examine the impact that certification of single engine turbine (SET) aircraft for commercial public transport services by the *European Aviation Safety Agency (EASA)* might make on the viability of the different routes under consideration, and to consider the potential role of Alternative Ownership and Operating Models where the Welsh Government might facilitate desired innovation.
- 6.2 The study considered two representative SET types from a range of operational and perspectives, and the type does offer possibilities within Wales under certain options.
- 6.3 The potential for cost savings is not dramatic in the short term, but the potential for downstream intra Welsh route elaboration does exist, although most of these possibilities, it is suggested, are revisited in 3-5 years.
- 6.4 Two types were examined in detail as being representative of the 'class'. The Cessna Grand Caravan (unpressurised) and the Pilatus P12 (pressurised). A pressurised aircraft delivers a superior passenger experience, by flying 'above the weather', avoiding decompression discomfort and, because of height, requiring fewer emergency divert airfields.
- 6.5 Some savings are possible (see table 17), but not so significant if the more attractive Pilatus P12 is selected. A series of cost estimates were made on both the existing route and some possible other intra-Welsh routes (Table 18).

TABLE 17: COST COMPARISON - INCUMBENT BASE CASE (LET410) VS ALTERNATIVE S.E.T.S

Anglesey to Cardiff (x2 daily M-F)

Aircraft Type	Seat Capacity (PA)	Op Cost Estimate (£ PA)	Ops Cost relative to base/estimated change in PSO Subsidy (£ PA)
LET 410 – 17 seat	16660	967,000	Base
Cessna Grand Caravan – 9 seat	8820	773,000	-194,000
Pilatus PC12 – 9 seat	8820	946,000	- 21,000

Anglesey to Cardiff (x3 daily M-F)

Aircraft Type	Seat Capacity (PA)	Op Cost Estimate (£ PA)	Ops Cost relative to base/estimated change in PSO Subsidy (£ PA)
Cessna Grand Caravan – 9 seat	13230	948,000	- 19,000
Pilatus PC12 – 9 seat	13230	1,129,000	+ 162,000

Anglesey to Cardiff (x4 daily M-F)

Aircraft Type	Seat Capacity (PA)	Op Cost Estimate (£ PA)	Ops Cost relative to base/estimated change in PSO Subsidy (£ PA)
Cessna Grand Caravan – 9 seat	17640	1,122,000	+ 155,000
Pilatus PC12 – 9 seat	17640	1,313,000	+ 346,000

TABLE 18: COST COMPARISON - INCUMBENT BASE CASE (LET410) VS ALTERNATIVE S.E.T.S FOR NEW ROUTES

New route options:

Hawarden to Cardiff (x2 daily M-F + x1 daily Sat/Sun)

Aircraft Type	Seat Capacity (PA)	Op Cost Estimate (£ PA)	Ops Cost relative to base/estimated change in PSO Subsidy (£ PA)
LET 410 – 17 seat	20400	1,345,000	Base
Cessna Grand Caravan – 9 seat	10800	987,000	- 358,000
Pilatus PC12 – 9 seat	10800	1,201,000	- 144,000

Hawarden to Cardiff (x3 daily M-F + x2 daily Sat/Sun)

Aircraft Type	Seat Capacity (PA)	Op Cost Estimate (£ PA)	Ops Cost relative to base/estimated change in PSO Subsidy (£ PA)
LET 410 – 17 seat	32300	1,771,000	Base
Cessna Grand Caravan – 9 seat	17100	1,256,000	- 515,000
Pilatus PC12 – 9 seat	17100	1,505,000	- 241,000

Hawarden to Haverford West (x2 daily M-F + x1 daily Sat/Sun)

Aircraft Type	Seat Capacity (PA)	Op Cost Estimate (£ PA)	Ops Cost relative to base/estimated change in PSO Subsidy (£ PA)
LET 410 – 17 seat	20400	1,277,000	Base
Cessna Grand Caravan – 9 seat	10800	933,000	- 344,000
Pilatus PC12 – 9 seat	10800	1,147,000	- 130,000

Cardiff to Haverford West (x2 daily M-F + x1 daily Sat/Sun)

Aircraft Type	Seat Capacity (PA)	Op Cost Estimate (£ PA)	Ops Cost relative to base/estimated change in PSO Subsidy (£ PA)
LET 410 – 17 seat	20400	1,214,000	Base
Cessna Grand Caravan – 9 seat	10800	893,000	- 321,000
Pilatus PC12 – 9 seat	10800	1,110,000	- 104,000

6.6 Table 18 examines potential cost savings on possible new intra-Welsh routes and does illustrate some quite significant savings. For instance, at Haverfordwest²¹ a 9-seater aircraft would also likely remove the need for security infrastructure to be installed, and suggests a very simple customer terminal waiting area would suffice delivering further savings.

6.7 Care needs to be taken with regard to public acceptance and confidence in the aircraft type and single engine concept.

²¹ Haverfordwest is an airport in West Wales run by Pembrokeshire County Council that does not currently cater for commercial scheduled air services.

7 FUTURE OPTIONS FOR AVIATION PSO'S IN WALES

- 7.1

The Welsh Government commissioned a wider-ranging review of the prospects for internal scheduled air transport services in Wales. This included options for reducing the costs/subsidy per head of the extant Valley service, comparing that service routing against a possible alternative from Hawarden to Cardiff and then latterly looking at the prospects for internal services from Haverfordwest and the other smaller airports in Wales and different combinations thereof.
- 7.2

It was established from passenger surveys, that the use of the PSO is much more diverse than is pre-supposed (Figure 3); 25% of pax surveyed were on their first PSO flight suggesting a significant 'churn' of users (Figure 4). The presence of regular users also indicates that a real benefit is being delivered by the service. Two thousand separate people and about six thousand different people should use the route over a 4 year PSO period.

FIGURE 3A: 2016 PASSENGER SURVEY – BUSINESS TRAVELLERS ANALYSED

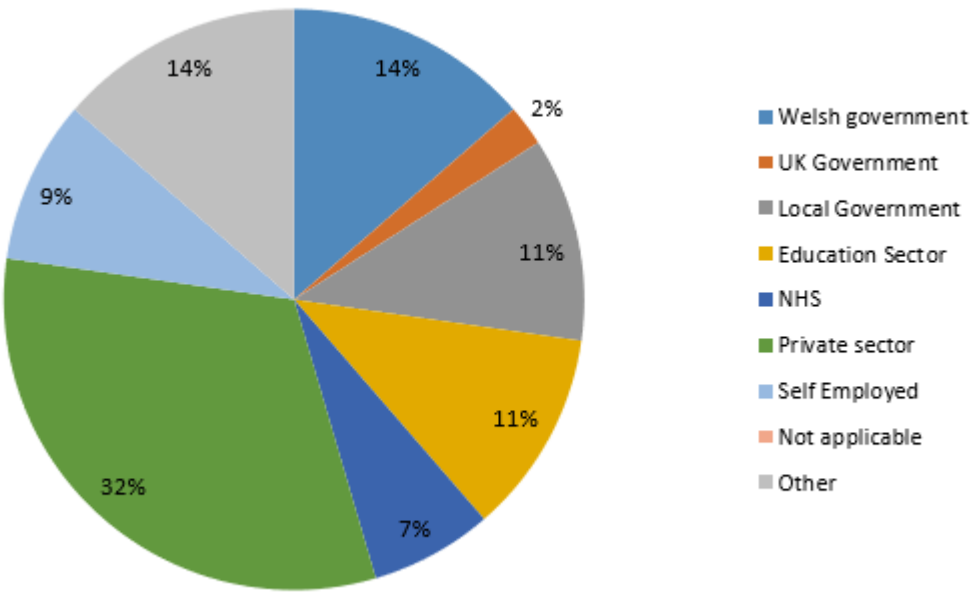
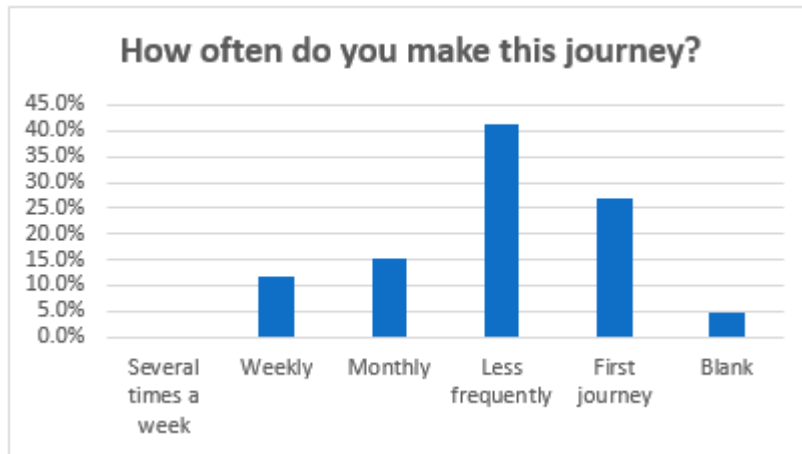


FIGURE 4: 2016 PASSENGER SURVEY – HOW OFTEN DO YOU MAKE THIS JOURNEY?



- 7.3 The work was undertaken in two key parts; the first of which was to include reduction of, or even closure implications on, the PSO service. In addition, Hawarden was also examined with regard to a PSO to Cardiff and also other route development opportunities out of the airfield – assuming that scheduled air services were established there.

TABLE 19: IMPACT ON JOBS UNDER VARIOUS SCENARIOS

	Assum'd Pax Nos in 2017	Estimated Direct Jobs	Indirect + Induced Jobs	Total Jobs Supported
Ceasing all provision	-9000	-10.8	-16	-27
Reducing frequency of flights	7200	8.64	13	21
Maintaining the status quo - change little	9000	10.8	16	27
Maintaining status quo with changes (timetable, marketing and operator incentives)	11000	13.2	19	32

- 7.4 Approximately 30 jobs are involved in providing the current level of service (Table 19). If the PSO aircraft can find other tasks, then the jobs created approximately double. If access to LHR is achieved, significant multiples of current employment are created (see Tables 20).

TABLE 20: IMPACT ON JOBS FOR EXPANSIONIST SCENARIOS

Pax Forecasts	Est. 2022 Pax Nos	Estimated Direct Jobs	Indirect + Induced Jobs	Total Jobs Supported
Maintaining status quo with changes (timetable, marketing and incentives)	13,000	15.6	23	38
Increasing usage - adding other routes/services (assumes move to 30 <u>seater</u> in 5 years) and Franchise / GDS marketing	18,000	21.6	32	53
Illustrative enhancement CWL-FRA via NWI	20,800	24.96	36	61
Basing aircraft in Anglesey (capital costs) Hanger and NASP	17,000	20.4	30	50
Illustrative enhancement VLY-NHT or VLY-LHR	99,000	118.8	173	292

- 7.5 The current subsidy approximates to current benefits. Increasing usage on current services increases VFM²². Additional aircraft use and LHR access delivers some much larger prizes (see Table 21 & 22).

TABLE 21: ECONOMIC IMPACT (GVA) UNDER CORE SCENARIOS

²² Value for Money

Pax Forecasts	Est. 2017 Pax Nos	% Business Pax	Travel Cost Saving per Business Pax (£)	Time Savings per Pax (hrs)	Cost Saving pa - Air vs Road (£)	User Benefits (£)	GVA (£/m)
Ceasing all provision	-9,000	62%	£48	2.5	-£267,840	-£1,125,000	-£1.39
Reducing frequency of flights	7,200	62%	£48	2.5	£214,272	£900,000	£1.11
Maintaining the status quo - change little	9,000	62%	£48	2.5	£267,840	£1,125,000	£1.39
Maintaining status quo with changes (timetable, marketing and operator incentives)	11,000	62%	£48	2.5	£327,360	£1,375,000	£1.70

TABLE 22 ECONOMIC IMPACT (GVA) UNDER VARYING SCENARIOS

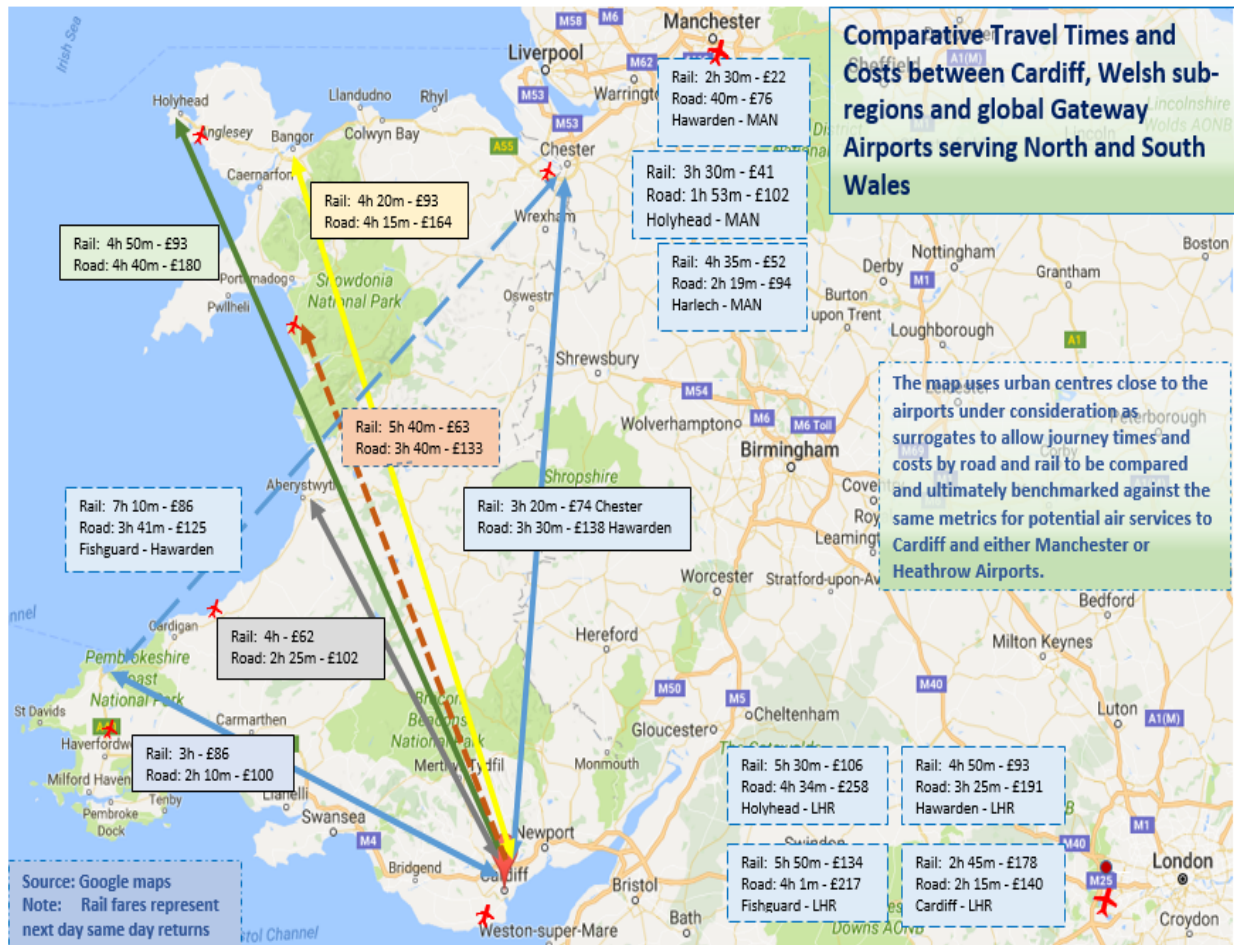
Pax Forecasts	Est. 2022 Pax Nos	% Business Pax	Travel Cost Saving per Business Pax (£)	Time Savings per Pax (hrs)	Cost Saving pa - Air vs Road (£)	User Benefits (£)	GVA (£/m)
Maintaining status quo with changes (timetable, marketing and incentives)	13,000	62%	48	2.5	£20,150	£1,625,000	£1.65
Increasing usage - adding other routes/services (assumes 30 seater in 5 years & GDS marketing)	18,000	62%	48	2.5	£27,900	£2,250,000	£2.28
Illustrative enhancement CWL-FRA via NWI	20,800	68%	55	7.5	£106,080	£7,800,000	£7.91
Basing aircraft in Anglesey (capital costs) Hanger and NASP	18,000	62%	48	2.5	£27,900	£2,250,000	£2.28
Illustrative enhancement VLY- NHT or VLY- LHR	99,000	68%	48	4.5	£302,940	£22,275,000	£22.58

7.6 In the second phase of the PSO Review, the prospects for other airfields such as Caernarfon, Llanbedr, Aberporth, Mid Wales Airport, Haverfordwest, Swansea and Pembrey were also considered from the point of view of possible PSO air services. They were each rejected on the grounds set out in the substantive supporting technical report, with only Haverfordwest identified as having a possible medium term role, leaving us with

potentially four airports still under consideration, each of which served a different part of Wales.

- 7.7 We then compared travel times and costs between Cardiff, Welsh sub-regions and global gateway airports serving Wales – most notably Manchester and Heathrow. The results are summarised in Figure 5.

FIGURE 5: COMPARATIVE TRAVEL TIMES AND COSTS BETWEEN CARDIFF, WELSH SUB-REGIONS AND GLOBAL GATEWAY AIRPORTS SERVING N & S WALES



7.8 As a rule of thumb terrestrial journeys of less than two hours leave little room for air travel to play a role. Between two and three hours in certain circumstances (mainly business) air can have a role to play, whilst above three and particularly over four hours, air services can contribute significantly to the connectivity of a region.

- 7.9 The previous analysis leads to some simple geographic truths about what may be both required, and possible, in the four corners of Wales (see Figure 6) in terms of air services. This is reinforced when the potential importance of air connectivity is considered to and between these areas, and the Enterprise Zones located in them, as their economies change and their infrastructure is enhanced over time. Hence:

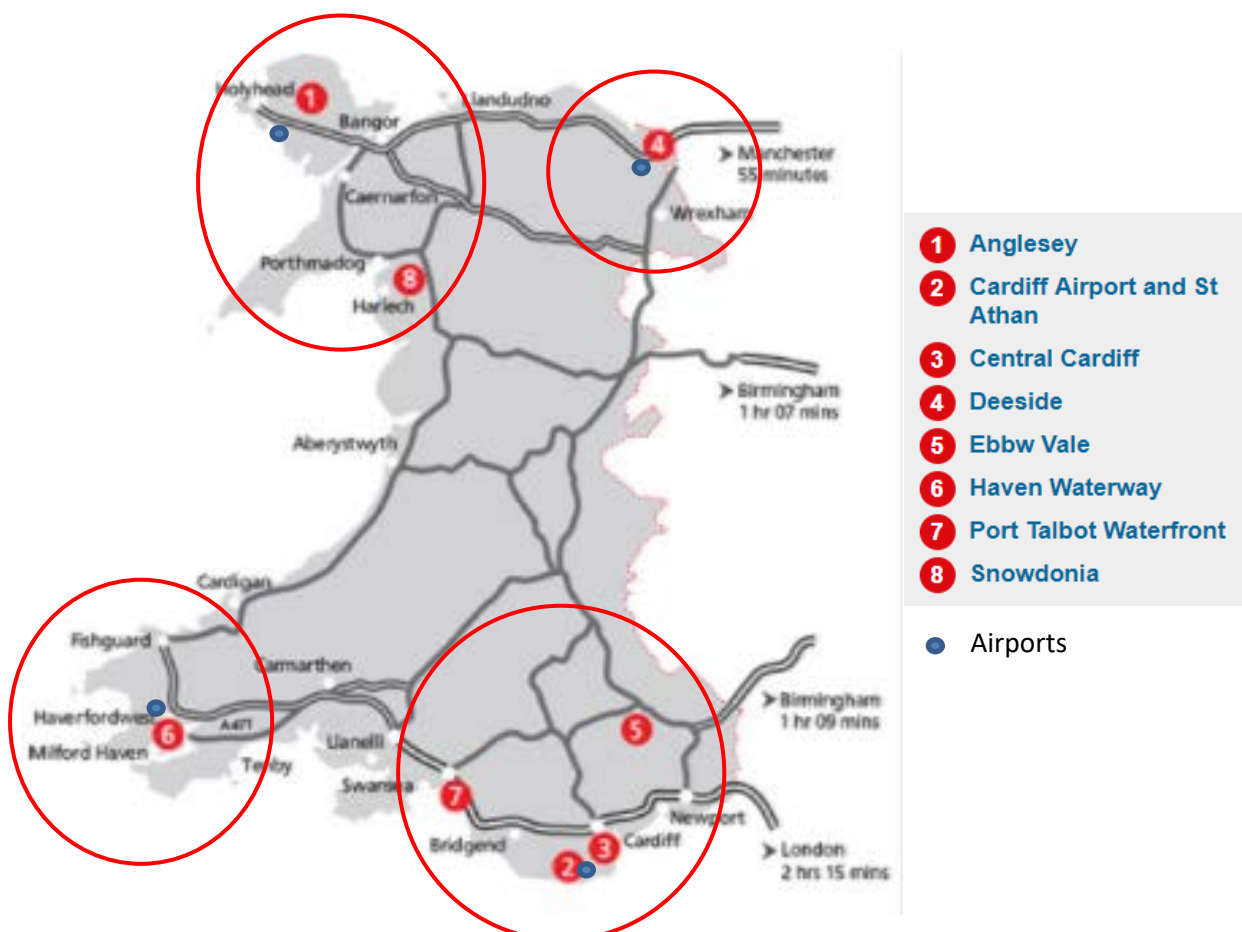
Cardiff Airport/St Athan - is now in public ownership and being targeted for aerospace/motor industry

Deeside Hawarden – is a high-tech employment cluster of UK significance

NW Wales – exciting projects – Nuclear Power – Energy Island – University – Holyhead waterfront renewal – World Class tourist offer

SW Wales – adjusting to contractions in oil refining – tourist destination

FIGURE 6: WELSH DEVELOPMENT ZONES AND RELATIONSHIP WITH WELSH AIRPORTS



- 7.10 This led us to focus our subsequent route level investigations on Hawarden and Haverfordwest (with Cardiff and Anglesey having been thoroughly investigated previously). The qualification to this was examining the potential utility of SET aircraft operating out of Cardiff to Valley. Then as in the PSO Extension study, we generated a significant number of route forecasts, subjected them to Apex analysis before considering them in terms of economic impacts and finally examined them through the lens of the WelTAG process. This analysis is summarised in the Tables that follow.

Market Analysis and Demand Forecasting

- 7.11 Our starting point was to take advantage of recently released 2015 CAA survey data to explore the existing travel patterns of air passengers lying within a 30-minute drive-time catchment of Hawarden Airfield and one 2-3 times as large for Haverfordwest, the difference being competition from Liverpool and Manchester at Hawarden, whereas Haverfordwest has little or none. We also recalibrated the Gravity Model used in the original 2003 route feasibility studies to estimate the number of passengers who currently make surface journeys; and from that, we derive a number of passengers that would potentially switch to air travel, as this is not picked-up in the CAA data (see Table 23).

TABLE 23: GRAVITY MODELLED AIR DEMAND BETWEEN VARIOUS RELEVANT AIRPORTS

	Cardiff – Haverfordwest	Cardiff - Hawarden	Hawarden - Haverfordwest	London - Hawarden
Base Market Potential	10,617	14,855	12,391	17,416
3x Daily Service	8,494	11,884	9,913	13,933
2x Daily Service	6,901	9,656	8,054	11,320

- 7.12 Then combining both, we generated Table 25, which is a high-level overview that sets out overall projected demand figures and integrates them with optimal frequency and aircraft type to identify routes that look likely to succeed. The red scoring indicates those that are most promising and the basis for reaching those conclusions is set out in Table 24 below.

TABLE 24

Route Evaluation	
Less 30%	Non-starter
30-40%	Very Poor
40-50%	Poor
50-60%	Modest
60-70%	Possible
70-80%	Promising
80-90%	Good
90-100%	Very Good
Greater 100%	Outstanding

TABLE 25: HIGH LEVEL MARKET APPRAISAL OF PSO REVIEW ROUTE OPTIONS

Service Routing	Assumptions	Catchment Leakage	Freq'y per week	Competition	Attractiv'ness over Alternatives	Assumed Market Penetr'ti'n	Existing Market Captured	Potential Stimulation	Estimated Total Demand	Seat Capacity	Projected Load Factor	Route Evaluation	Comments
Anglesey - 9 seater													
VLY - CWL	9-seater	11,000	10	Road/rail	High	70%	7,700	-10%	6,930	8,640	80.2%	Good	PTP traffic source PSO commercial data; higher seat costs than existing.
VLY - CWL	9-seater	11,000	15	Road/rail	High	80%	8,800	10%	9,680	12,960	74.7%	Promising	PTP traffic source PSO commercial data; higher seat costs than existings
Hawarden													
CEG-CWL	9-seater	9,656	12	Road/rail	Moderate	60%	5,794	20%	6,952	10,800	64.4%	Possible	PTP traffic sourced from RCFM;
CEG-CWL	9-seater	11,884	17	Road/rail	Moderate	70%	8,319	20%	9,983	15,200	65.7%	Possible	PTP traffic sourced from RCFM;
CEG-CWL	19-seater	9,656	12	Road/rail	Moderate	65%	6,276	25%	7,846	22,800	34.4%	Very Poor	PTP traffic sourced from RCFM;
CEG-CWL	19-seater	11,884	17	Road/rail	Moderate	75%	8,913	25%	11,141	32,300	34.5%	Very Poor	PTP traffic sourced from RCFM;
CEG-LHR	31-seater	100,000	12	Road/rail	Moderate	20%	20,000	15%	23,000	37,200	61.8%	Possible	Larger and quicker aircraft will be needed for access to Heathrow
CEG-LHR	31-seater	100,000	17	Road/rail	Moderate	30%	30,000	25%	37,500	52,700	71.2%	Promising	Larger and quicker aircraft will be needed for access to Heathrow
CEG-LHR	50-seater	100,000	12	Road/rail	Moderate	25%	25,000	20%	30,000	60,000	50.0%	Modest	Larger and quicker aircraft will be needed for access to Heathrow
CEG-LHR	50-seater	100,000	17	Road/rail	Moderate	35%	35,000	30%	45,500	85,000	53.5%	Modest	Larger and quicker aircraft will be needed for access to Heathrow
CEG-AMS	31-seater	142,000	12	Air LIV/MAN	Moderate	20%	28,400	10%	31,240	37,200	84.0%	Good	Good performance to alternative hubs - big connecting market
CEG-CDG	31-seater	80,000	12	Air MAN	Moderate	35%	28,000	15%	32,200	37,200	86.6%	Good	As above but less competition from LIV on Paris
CEG-ICM	9-seater	34,000	12	Air LIV/MAN	Low/Moderate	15%	5,100	20%	6,120	10,400	58.8%	Non-Starter	Probably not
CEG-INV	19-seater	9,280	6	Air MAN	High	60%	5,568	30%	7,238	11,400	63.5%	Possible	ostensibly good but risks
CEG-DUB	31-seater	117,000	12	Air LIV/MAN	Low	10%	11,700	15%	13,455	37,200	36.2%	Very Poor	ostensibly good but risks
CEG-BHD	19-seater	100,000	12	Air LIV/MAN	Low/Moderate	15%	15,000	15%	17,250	22,800	75.7%	Promising	ostensibly good but risks
Haverfordwest													
HAW-CWL	9-seater	10,620	12	road/rail	Moderate	60%	6,372	10%	7,009	10,800	64.9%	Possible	Market less strong than Anglesey due to shorter travel times on all modes
HAW-CWL	9-seater	10,620	17	road/rail	Moderate	75%	7,965	10%	8,762	15,200	57.6%	Modest	Market less strong than Anglesey due to shorter travel times on all modes
HAW-CWL-LHR	9-seater	72,500	17	road/rail	Moderate	20%	14,500	15%	16,675	15,200	109.7%	Outstanding	When can connect to LHR shuttle at CWL becomes outstanding
HAW-CWL-LHR	19-seater	72,500	6	road/rail	Moderate	15%	10,875	10%	11,963	11,400	104.9%	Outstanding	When can connect to LHR shuttle at CWL becomes outstanding
HAW-CEG	9-seater	12,390	12	road/rail	Moderate/High	65%	8,054	5%	8,456	10,800	78.3%	Promising	More than 1 frequency a day and attractive pricing could make this promising
HAW-CEG	9-seater	12,390	17	road/rail	Moderate/High	75%	9,293	15%	10,686	15,200	70.3%	Promising	More than 1 frequency a day and attractive pricing could make this promising
Triangulation between VLY and CEG													
VLY/CEG-CWL	19-seater	25,855	10	road/rail	Moderate/High	60%	15,513	5%	16,289	18,240	89.3%	Good	risks and sig. subsidy
VLY/CEG-CWL	19-seater	25,855	15	road/rail	Moderate/High	75%	19,391	5%	20,361	27,360	74.4%	Promising	risks and sig. subsidy
VLY/CEG-CWL	31-seater	25,855	10	road/rail	Moderate/High	60%	15,513	5%	16,289	29,760	54.7%	Modest	risks and sig. subsidy
VLY/CEG-CWL	31-seater	25,855	15	road/rail	Moderate/High	75%	19,391	5%	20,361	44,640	45.6%	Poor	risks and sig. subsidy
VLY/CEG-CWL	50-seater	25,855	10	road/rail	Moderate/High	65%	16,806	10%	18,486	48,000	38.5%	Very Poor	risks and sig. subsidy
VLY/CEG-LHR	31-seater	140,000	15	Air MAN/road/rail	Moderate	35%	49,000	20%	58,800	44,640	131.7%	Outstanding	very attractive
VLY/CEG-LHR	50-seater	140,000	10	Air MAN/road/rail	Moderate	25%	35,000	15%	40,250	48,000	83.9%	Good	very attractive
VLY/CEG-LHR	50-seater	140,000	15	Air MAN/road/rail	Moderate	40%	56,000	25%	70,000	72,000	97.2%	Very Good	very attractive

Commentary: This table (Table 25) was used to shortlist the PSO aircraft route enhancement options. The red scoring indicated those that justified exploring further. However, additional filters thinned this further. For instance, though the 9-seat solution looked promising in terms of load factors, the more detailed review of SET's undertaken separately rejected them on the basis of cost (and some other considerations). The links to Hubs all scored well. (Note: PTP stands for Point to Point and RCFM Regional Connectivity Forecasting Model)

APEX Commercial Appraisal

- 7.13 In order to provide a consistent and up to date platform for undertaking the kind of commercial modelling the study required, Northpoint secured access to RDC Aviation's APEX model, which allows multiple options and input variations to be examined relatively quickly, and produces outputs in a useful spreadsheet format. There were a number of limitations with using APEX to examine the kind of PSO and thin route services the study is focused on:
- the standard input menu in the model contains only a limited number of small aircraft – for example the Cessna Caravan is not represented and it was necessary to introduce new aircraft into the simulation: the pressurised Pilatus P12, as representative of the 9 seat category (although more expensive than the Caravan) and also the Dornier 228NG, which is an unpressurised 19 seater but has recently been brought back into production.
 - not all potential destinations were accessible (e.g. Hawarden and Haverfordwest had to be introduced into the software as new airfields with some reasonable, but approximated, assumptions about their charges being made.)
 - drop-in or tri-angulated services are not easy to appraise as the model works on a single sector at a time.
- 7.14 Nonetheless, APEX utilises up to date operating cost information from aircraft manufacturers and airports, and has the facility to specify fuel price and charging discount assumptions. It is also helpful for facilitating direct comparisons between carriers, aircraft types or nearby airport alternatives and allows the user either to use a simple 'breakeven' mode where very little by way of external inputs are required, or a more complex advanced function in which a range of input parameters can be used to refine and tailor model runs to local conditions or external user judgements. Northpoint has made significant use of the latter to generate the financial outputs that follow, using their in-depth knowledge of individual markets, competition, airport pricing strategies and airline business models.
- 7.15 More details on the APEX outputs can be found in the main ***Technical Report into Long Term Future Options for Aviation PSOs in Wales (Table 1)***, but the key results are summarised in the Tables 26 – 30 below. These tables also contain a final column where Northpoint has adjusted the output profit and loss figures from APEX to generate an implied subsidy level based on the fares that realistically, might be expected. So, for example in Table 26 the SET aircraft study assumed the average fare would remain similar to the current fare of c£45 and hence subsidy projected was higher. In the ***Aircraft Considerations Report (Table 1)***, it assumed the P12 would cost an extra £20k subsidy per year for current service levels, and an extra £160k per year if 3 flights per day were operated.

Cardiff to Anglesey

TABLE 26(a): CARDIFF TO ANGLESEY PILATUS P12 ROUTE APPRAISAL

Route	Aircraft Size	Frequency	Route Profit and Loss	Implied Subsidy (+/- 15%)
CWL-VLY	8 (Pilatus P12)	10 (reduced capacity) assumed £80 av. fare	Loss of £225,000 on 80% load factor (6600 pax)	£650,000 (incl £350k VLY civilian enclave)
CWL-VLY	8 (Pilatus P12)	15 (current capacity) assumed £80 av. fare	Loss of £380,000 on 74.7% load factor (9320 pax)	£780,000 (incl £350k VLY civilian enclave)

7.16 Table 26a, is extracted from the separate SET study summarised above (referenced in Table 1). The aircraft can be operated in a one or two pilot configuration. The requisite subsidy will in our estimation not be so very different from the Let 410 subsidy but it will offer even with less capacity. Table 26b estimates subsidy per head over the last decade. It should also be noted that the subsidy estimate was based upon higher fares that currently achieved (£80 vis a vis an estimated £45 per sector). Indeed to reach breakeven average fares of £110 would be required on anticipated and reduced carryings. It is worth noting that current average fares are estimated to be in the £45 range, and should not be confused with the PSO stipulated £70-£90 maximum fare range.

TABLE 26(b): ESTIMATED SUBSIDY PER HEAD

Period	Pax Numbers	Annual Subsidy	Subsidy / pax
May07-Aprl08	14,133	£810,000	£57
May08-Aprl09	14,718	£710,000	£48
May09-Aprl10	8,894	£730,000	£82
Jun10-May11	9,240	£820,000	£89
Jun11-May12	9,663	£1,150,000	£119
Jun12-May13	8,307	£1,125,000	£135
Jun13-May14	8,526	£1,194,000	£140
Jun14-May15	10,046	£1,201,000	£120

7.17 Bearing in mind that the public purse would still have to accept the cost of the Anglesey Airport civilian enclave operation (at approximately £350k per annum) we can appreciate that for example 6,600 passengers (which was modelled) using the route with the P12 would be requiring something of the order of £53 / head to contribute the civilian enclave aspect alone.

The public purse might be facing a subsidy of approximately £110 / head. Of course, because of the reduced capacity, there might be room to raise the fare on the route and thereby reduce this burden somewhat. However, the scope for fulfilling social inclusion aspirations and broadening the pool of beneficiaries for the service would be reduced and it might be susceptible to claims that it was a subsidised business class service.

- 7.18 Increasing the frequency as set out below will better respond to (or match) current demand, but with the average subsidy per passenger now rising to over £120 / head. (*PSO Review Technical Report* for more detail)

Cardiff to Haverfordwest

TABLE 27: CARDIFF TO HAVERFORDWEST

Route	Aircraft Size	Weekly Frequency	Route Profit and Loss	Implied Annual Subsidy (+/- 15%)
CWL-HAW	9 seats (Pilatus P12)	12/week assumed £80 av. fare. However, if £45 is more achievable then a higher subsidy will be required	Loss of between £285,000 to £510,000 (load factors 65% - 6,500 pax)	£350,000- £575,000 (Marketing and additional minor staff costs at HAW of £65k assumed)
CWL-HAW	18 seats (Dornier 228)	6/week assumed £100 av. fare. However, if £45 av. fare is more achievable then a higher subsidy will be required	Projected requiring no subsidy with only 1 flight per day, but expensive £100 av. fare, all of which would reduce attraction and hard to credit 7,600 pax carried (65% load factor).	Subsidy thereby approaching £200,000 with additional costs at HAW, but likely much more as market is constrained.
CWL-HAW	18 seats (Dornier 228)	12/week assumed £100 av. fare. However, if £45 is more achievable then a higher subsidy will be required	Scenarios range between profit of £358,000 to loss of £180,000 projected on load factors of 65%, which is above demand estimates.	No subsidy to £200,000 subsidy. (Marketing and additional staff costs at HAW of £65k assumed), but likely much more
CWL-HAW	31 seats (Dornier 328)	12/week assumed £100 av. fare. However, if £45 av. fare is more achievable then a higher subsidy will be required	Profit of £982,000 possible on an unlikely 80% load factor and 32,000 carryings.	If 65% load factor and £45 av. fare assumed, then subsidy of £1.45 million is projected. (Marketing and additional staff costs at HAW of £65k assumed.) NASP and extra staffing would also be required (un-costed)

- 7.19 Turning to Haverfordwest, a 12-rotations per week service requires a fare of over £120 to breakeven unless load factors are particularly high (such as a difficult to achieve 90% load factor), when average fare may fall to more like £100.
- 7.20 APEX was then used to explore the route economics of an un-pressurised 19 seat Dornier 228 and a pressurised 31 seat Dornier 328. Even with very large passenger patronage (above what market demand indicates from our other enquiries) or high load factors (again hard to envisage) the services could not be made to breakeven on £100 average fares.

Hawarden to Heathrow, Amsterdam and Paris

- 7.21 In this section, the high-level economics of running various aircraft to major hubs such as Heathrow and Amsterdam are considered. (*PSO Review Technical Report* for more detail)

TABLE 28: HAWARDEN (CEG) TO HEATHROW (LHR), AMSTERDAM (AMS) AND PARIS (CDG)

Route	Aircraft Size (Capacity)	Weekly Frequency	Route Profit and Loss	Implied Annual Subsidy (+/- 15%)
CEG-LHR	Dornier 328 100 (31)	12	754,000 loss (assumes high-ish £150 average fare so could be more) 65% load factor	£800,000 subsidy plus NASP capital cost
CEG-LHR	Dornier 328 100 (31)	17	Approaches breakeven at £175 average fare. 65% load factor	Suggests modest / no subsidy plus NASP capital cost
CEG-AMS	Dornier 328 100 (31)	12	£350,000 profit on £140 av. Fare. and 65% load factor	No subsidy but NASP capital cost
CEG-AMS	Dornier 328 100 (31)	17	Similar profit on £120 av. Fare and 75%. Load factor	No subsidy but NASP capital cost
CEG-CDG	Dornier 328 100 (31)	12	Breakeven at 70% load factor and £120 fare	No subsidy but NASP capital cost

- 7.22 Turning our attention to Heathrow we can appreciate that a Dornier 328 can exceed breakeven with 65% load factor with three flights per day, although with a rather expensive average yield (£175). Two flights per day does not really work on comparable load factors.
- 7.23 Table 28 establishes that if average load factors are higher, then profitability is achievable, without the fares being too high. However, load factors of say 85% are very hard to envisage and achieve, and it is possible that a service to LHR may require subsidy.

- 7.24 The prospect of commercially profitable operations at Amsterdam looks strong across all options and at lower fares. This is no doubt partially due to airport charges being lower. However, it should be remembered that Heathrow is offering discounted packages to UK regions and this might become material to the economics of routes such as this, and certainly charges at Northolt would be competitive if access were permitted.
- 7.25 A Dornier 328 to CDG (Charles de Gaulle) looks promising across a range of price points, but requires a strong load factor.

Hawarden to Haverfordwest

TABLE 29: HAWARDEN TO HAVERFORDWEST, AND HAWARDEN TO BELFAST CITY

Route	Aircraft Size (Capacity)	Weekly Frequency	Route Profit and Loss	Implied Subsidy (+/- 15%)
CEG-HAW	Pilatus P12 (8)	12	£385,000 loss on £75 av. fare and 78.3% load factor	£500,000 (Marketing and additional minor staff costs at HAW of £65k assumed)
CEG-HAW	Pilatus P12 (8)	17	£500,000 loss on av. £80 fare and 70.3% load factor	£565,000 (Marketing and additional minor staff costs at HAW of £65k assumed)
CEG-BHD	Dornier 228 (19)	12	£200,000 loss on av. £80 fare and high load factor of 70%	£265,000 (Marketing and additional minor staff costs at HAW of £65k assumed)
CEG-BHD	Dornier 328-100 (32)	12	£900,000 profit on 70% load factor and 27,000 pax demand	Possibly self funding

- 7.26 In the case of a service between Haverfordwest and Hawarden, it is hard to envisage profitability on a 9-seater aircraft at likely price points and hence it looks like a PSO subsidy would be required. Increasing the frequency only compounds the challenge.
- 7.27 A 19 seat Dornier 228 can potentially be made to work on a flight to Belfast City with good load factors and the Dornier 328 also works at a similar load factor.

Triangular Routes Linking Cardiff to Hawarden and Anglesey

TABLE 30: TRIANGULAR ROUTES LINKING CARDIFF TO HAWARDEN AND ANGLESEY

Route	Aircraft Size (capacity)	Weekly Frequency	Route Profit and Loss	Implied Subsidy (+/- 15%)
CWL-HAW-VLY	Dornier 228 (19)	12	Loss of £2.9m on 75% and 60% load factor (LF) on diff. legs (£50 & £25 av. fares) £125 return	£3m loss likely
CWL-CEG-VLY	Dornier 228 (19)	12	Loss of £3.4m on low fare regime and 75% and 60% LF on diff. legs (£65 & £45 av. fares) £175 return	£3.5m loss likely
CWL-CEG-VLY	Dornier 228 (19)	12	Loss of £125k on higher fare regime and 75% and 60% LF on diff. legs (£80 & £45 av. fares) £205 return	£125k loss likely on higher fare regime
VLY-CEG-LHR	Dornier 328-100 (32)	12	£3.2m loss predicted. Fare regime on high 80% and 60% LF and £100 & £50 av. fares £250 return	£3.2m loss likely plus £350k civilian enclave at CEG and NASP costs at both
VLY-CEG-LHR	Saab 2000 (50)	12	£152k loss predicted. Fare regime on 75% and 60% LF and £90 & £60 av. fares £240 return	£152,000 loss likely plus £350k civilian enclave at CEG and NASP costs at both

7.28 In Table 30 we look at a possible 'triangulation'. There are several attractions to triangulation that can be balanced against its downsides for passengers requiring slightly longer journey time than otherwise (with an interim stop). The first three simulations are with a 19 seat Dornier 228 and explore losses at varying fares. The final options are a 32 seat Dornier 328 and 50 seat Saab2000 flying into Heathrow.

7.29 Note the combined fares highlighted (e.g. CEG-LHR x 2 Plus 1 VLY-CEG) will in effect be a return fare, assuming the routing is true triangle²³. In these simulations the VLY-CEG leg has been priced lower than the other 'more desirable' leg, and it is assumed that each passenger will pay a return on the desirable leg and one single on the VLY-CEG leg. It has also been assumed that load factors on the VLY-CEG leg will be lower, as this is not really point to point demand, but largely through travel demand. Hence the return fare is twice the high fare leg and once the lower fare leg.

7.30 If a higher fare regime is used on CWL-CEG-VLY losses are reduced considerably, albeit at high assumed load factors, which because of the demand sharing identified, might be expected.

²³ There can be different permutations to such a routing eg VLY-CEG-LHR and then LHR-VLY-CEG or VLY-CEG-LHR and then LHR-CEG-VLY. We have assumed the former which is referred to as a true triangle.

- 7.31 The advantages of triangulation are:
- Creating viability, where otherwise it would not exist;
 - Justifying a larger aircraft than might otherwise be the case;
 - Creating new itinerary options with split journeys for instance at each location;
 - Sharing the benefits of public support more widely;
 - And finally, as we will consider later, taking better advantage of scarce slots at a congested hub.
- 7.32 Until recently, Air South West used to successfully operate this kind of service from Plymouth and Newquay into London Gatwick. It was self-sustaining and profitable throughout the 1990's and 2000's, until Air South West were challenged on the route by Flybe.
- 7.33 However there have also been other examples such as:
- Inverness – Dundee – London;
 - Faroes – Shetland – London;
 - Inverness – Kirkwall – Sumburgh; and
 - A PSO route between Benbecula – Stornoway (as a PSO), shared with Stornoway – Inverness as a non PSO service, with passengers remaining on the aircraft.
- 7.34 Because APEX is not able to automate this process, the individual outputs for each leg need to be combined to produce a final result. Hence the three legs are illustrated and then combined in a final read summary. It will be noted that lower carryings and load factors are anticipated on the weaker leg.
- 7.35 Looking at the triangulation from North Wales into Heathrow, a picture emerges whereby the larger aircraft (Saab 2000) approaches breakeven. Heathrow is offering discounted packages to UK regions and this might become material to the economics of routes such as this – we estimate in the range of £10 / pax, which in these examples, would represent a £319,130 reduction in deficit on the Dornier and £584,900 contribution on the Saab bringing the operation into surplus.
- 7.36 The outcome of the APEX work was a slightly shorter list of route options that were then subjected to the same kind of indicative economic impact assessment and WelTAG appraisal as described for the enhancement and extension options in Chapter 3. The latter comprised considering a series of transport objectives, high-level WelTAG criteria, and finally Welsh Government Economic and Transport Policy Directives. The results are set out in Tables 31-34.

TABLE 31: ECONOMIC IMPACT APPRAISAL

Service Routing	Seat Capacity of Aircraft	Frequency per Week (Rtn Trip)	Estimated Total Demand	Estimate of Generated Traffic (think I did this wrong)	Projected Load Factor	Route Commercial Evaluation	Estimated Direct Jobs	Indirect + Induced Jobs	Total Jobs Created	% Business Pax	Travel Cost Saving per Business Pax (£)	Time Savings per Pax (hrs)	Cost Saving pa - Air vs Road (£)	User Benefits (£)	GVA (£/m)
VLY - CWL	9-seater	10	6,930	-770	80.0%	Good	8	12	20	62%	80	2.5	362,824	623,604	0.986
VLY - CWL	9-seater	15	9,680	880	75.0%	Promising	12	17	29	62%	80	2.5	458,304	787,710	1.246
CEG-LHR	31-seater	17	37,500	7,500	71.0%	Promising	45	66	111	60%	140	2.0	2,835,000	2,227,500	5.063
CEG-AMS	31-seater	12	31,240	2,840	84.0%	Good	37	55	92	50%	20	2.0	298,200	1,640,100	1.938
CEG-CDG	31-seater	12	32,200	4,200	87.0%	Good	39	56	95	50%	20	2.0	301,000	1,655,500	1.957
CEG-BHD	19-seater	12	17,250	2,250	76.0%	Promising	21	30	51	60%	120	2.0	1,161,000	1,064,250	2.225
HAW-CWL-LHR	9-seater	17	16,675	2,175	110.0%	Outstanding	20	29	49	60%	210	4.0	1,964,025	2,057,550	4.022
HAW-CWL-LHR	19-seater	6	11,963	1,088	105.0%	Outstanding	14	21	35	60%	115	4.0	787,877	1,507,242	2.295
HAW-CEG	9-seater	12	8,456	403	78.0%	Promising	10	15	25	50%	95	3.0	392,097	681,011	1.073
HAW-CEG	9-seater	17	10,686	1,394	70.0%	Promising	13	19	32	50%	30	3.0	149,841	824,123	0.974
VLY/CEG-CWL	19-seater	10	16,829	776	89.0%	Good	20	29	50	62%	50	2.0	509,671	1,121,276	1.631
VLY/CEG-CWL	19-seater	15	20,361	970	74.0%	Promising	24	36	60	62%	50	2.0	616,156	1,355,543	1.972
VLY/CEG-LHR	31-seater	15	58,800	9,800	132.0%	Outstanding	71	103	174	50%	110	3.0	2,964,500	4,446,750	7.411
VLY/CEG-LHR	50-seater	10	40,250	5,250	84.0%	Good	48	71	119	50%	110	3.0	2,069,375	3,104,063	5.173
VLY/CEG-LHR	50-seater	15	70,000	14,000	97.0%	Very Good	84	123	207	50%	130	3.0	4,095,000	5,197,500	9.293
Note: APEX runs were often for 12 rather than 10 or 15 so hard to interpolate.															

Commentary: Links into hubs deliver large GVA benefits. Larger aircraft, if they can be justified by demand, and if triangulations are entertained, also perform well.

TABLE 32: APPRAISAL AGAINST COMMERCIAL AND OPERATIONAL CONSIDERATIONS

Appraisal Against Commercial and Operational Considerations							
Route Option	Size	Per week	Minimise nos of late running flights	Delivers a good day's work at either end of the route	Contributes to the economic development of the catchments	Enhance external connectivity (direct & onward)	Maximise benefit of aircraft
VLV-CWL	9-seater	10	/	++	+	+	/
VLV-CWL	9-seater	15	/	++	+	++	++
CEG-LHR	31-seater	17	/	+++	+++	+++	+++
CEG-AMS	31-seater	12	/	++	+++	+++	++
CEG-CDG	31-seater	12	/	++	+++	+++	++
CEG-BHD	19-seater	12	/	++	+	+	++
HAW-CWL-LHR	9-seater	17	-	+++	+++	+++	+++
HAW-CWL-LHR	19-seater	6	-	/	+	++	-
HAW-CEG	9-seater	12	/	++	+	+	++
HAW-CEG	9-seater	17	/	++	+	++	++
VLV/CEG-CWL	19-seater	10	/	++	++	+	+
VLV/CEG-CWL	19-seater	15	-	+++	++	+	+++
VLV/CEG-LHR	31-seater	15	-	+++	+++	+++	+++
VLV/CEG-LHR	50-seater	10	/	++	+++	+++	++
VLV/CEG-LHR	50-seater	15	-	+++	+++	+++	+++

Appraisal Scoring	
+++	Large Beneficial
++	Moderate Beneficial
+	Slight Beneficial
/	Neutral
-	Slight Adverse
--	Moderate Adverse
---	Large Adverse

Commentary: This table provides some three star read-acrosses such as large 31 or 50 seat aircraft delivering a frequent point to point or triangulated service into LHR. A 9-seater also scores well, although this aircraft would be very unlikely to secure a slot at LHR, and so would be rejected on this (and other grounds).

TABLE 33: APPRAISAL AGAINST ESTABLISHED ECONOMIC, SOCIAL AND ENVIRONMENTAL DIRECTIVES

Appraisal Against Established Policy Directives					
Route Option	Size	Per week	Economy	Environment	Social
VLY-CWL	9-seater	10	+	-	+
VLY-CWL	9-seater	15	++	-	++
CEG-LHR	31-seater	17	+++	/	+++
CEG-AMS	31-seater	12	+++	/	++
CEG-CDG	31-seater	12	+++	/	++
CEG-BHD	19-seater	12	++	/	++
HAW-CWL-LHR	9-seater	17	++	-	++
HAW-CWL-LHR	19-seater	6	++	/	++
HAW-CEG	9-seater	12	+	+	+
HAW-CEG	9-seater	17	+	+	+
VLY/CEG-CWL	19-seater	10	+	+	++
VLY/CEG-CWL	19-seater	15	+	+	++
VLY/CEG-LHR	31-seater	15	+++	/	++
VLY/CEG-LHR	50-seater	10	+++	/	+++
VLY/CEG-LHR	50-seater	15	+++	/	+++

Commentary: This table provides some strong read-acrosses such as large 31 or 50 seat aircraft delivering a frequent point to point or triangulated service into LHR. However, the larger aircraft scores more neutrally on environmental grounds which must balance the greater emissions against the avoidance of long terrestrial access journeys (usually by car the evidence suggests) to a very congested part of the UK at LHR.

TABLE 34: APPRAISAL AGAINST A SERIES OF ECONOMIC AND TRANSPORT OBJECTIVES THAT THE STUDY TEAM DEVELOPED

Appraisal Against Established Policy			Economic					Transport				
Route Option	Size	Per week	Investing in quality/sustainable infrastructure (airports, air	Making Wales a more attractive place to do business (+ inward investment)	Broadening and deepening the skills base	Encouraging innovation	Targeted business support (Priority Sectors, SMEs and Enterprise Zones)	Reduce environmental impacts (reduce large car fed	Integrate Transport	Improve access between key sites	Enhance International Connectivity	Increase safety and security
VLY-CWL	9-seater	10	+	+	+	+	++	+	+	+	+	+
VLY-CWL	9-seater	15	++	++	+	+	++	+	+	+	+	+
CEG-LHR	31-seater	17	+++	+++	++	++	+++	+	++	+++	+++	+
CEG-AMS	31-seater	12	++	+++	++	++	++	+	++	++	+++	+
CEG-CDG	31-seater	12	++	+++	++	++	++	+	++	++	+++	+
CEG-BHD	19-seater	12	+	+	+	+	+	+	+	+	+	/
HAW-CWL-LHR	9-seater	17	+++	+++	++	++	+++	+	++	+++	+++	+
HAW-CWL-LHR	19-seater	6	++	++	+	+	++	+	+	++	++	+
HAW-CEG	9-seater	12	/	/	+	+	/	/	+	+	+	/
HAW-CEG	9-seater	17	/	/	+	+	/	/	+	+	+	/
VLY/CEG-CWL	19-seater	10	++	+	+	+	+	/	+	++	/	/
VLY/CEG-CWL	19-seater	15	++	++	++	++	++	/	++	+	/	/
VLY/CEG-LHR	31-seater	15	+++	+++	++	++	+++	+	++	+++	+++	+
VLY/CEG-LHR	50-seater	10	+++	+++	++	++	+++	+	++	+++	+++	+
VLY/CEG-LHR	50-seater	15	+++	+++	++	++	+++	+	++	+++	+++	+

Commentary: This attempt at a balanced and multi-faceted evaluation highlights the attractiveness of hubs and higher frequencies and capacities yet again. The triangulation options potentially justify larger aircraft on the route than if the routes were solely point to point.

PSO Regulations

7.37 With regard to the relevance of the EU PSO Regulations

- The only potential internal Welsh route that may have difficulty in justifying a PSO is Hawarden – Cardiff. Care would need to be taken to justify how this link is ‘vital’.
- Haverfordwest – Cardiff would be hard to justify as standalone, but if linked with a LHR shuttle, it should be justifiable.
- Haverfordwest – Hawarden should be justifiable.
- Routes into LHR should be able to be designed as PSOs once LHR has additional capacity – this should be resisted in the interim on pragmatic grounds – (no slots).
- There are niceties to observe regarding ‘bundling’ and ‘grouping’ of routes that are aired in the report narrative, and would need to be addressed with care.

Conclusions

7.38 In essence, this piece of work brings Hawarden into sharper focus for both intra Wales and possible other air services. It also permitted the study to take a more limited view on the possible role of other Welsh Regional Airports and these are reflected in the recommendations.

7.39 Overall, the appraisal tables point to the considerable benefits associated with developing links to hubs (Heathrow in particular). The attractions of triangulated or feeder flights are also apparent.

FIGURE 1: ILLUSTRATIVE AIR SERVICE DEPLOYMENT INTO EXPANDED HEATHROW



- 7.40 A key decision for the Welsh Government when considering the option appraisal, is whether in the light of this they want to focus on optimising use of a smaller 9 or 19 seat aircraft, or develop new routes and whether to support the additional cost of introducing +19 seat aircraft (including NASP implications), to expand the range of options that are possible, including international hubs as well domestic services, routes from Cardiff as well as Anglesey/Hawarden. On the assumption that this latter route share would be required to make it acceptable for Government and Heathrow to make available slots for such a North Wales air service.
- 7.41 Cardiff's larger market will offer reduced risk in route innovation and potentially bigger paybacks for Wales Plc in absolute terms.

8 STRATEGIC POLICY SCENARIOS

- 8.1 The portfolio of reports has made a range of more detailed recommendations for consideration. This section distils the detail into a set of options dependent upon strategic priorities.

The Policy Scenarios

- 8.2 Twelve Policy Options were summarised and subjected to a multi-faceted assessment.
- i. Base Case/Do Nothing: The PSO continues as now, no interventions; only background market growth assumed.
 - ii. Terminate Cardiff Anglesey PSO: The Welsh Government shuts down the PSO altogether, saves £1.5m per annum, and relies on train travel, but writes down investment costs and loss of economic benefits (negative Net Present Value (NPV) as a result of slower journey times). N.B. It should be highlighted that extra costs will be required to restore market confidence if the service is stopped in the meantime and then re-started in future. The Welsh Government should only terminate the service if it is 100% certain it does not want to operate it now, or in future.
 - iii. Adopt SET Solution for CWL-VLY: An option would be to retreat to a 9-seater and potentially save a maximum of £300k per annum, but reduce the passenger market further and increase the subsidy per passenger.
 - iv. Replace CWL-VLY with SET at CEG-CWL: The total market may well be bigger, and it would link two important aerospace clusters. North West Wales would need to access the service by car. This option would save on subsidy as it may only need a 9 seater aircraft with slightly shorter sector lengths.
 - v. Triangulate Anglesey & Hawarden to Cardiff route: This is an option using an existing 19 seat aircraft to avoid NASP (cost £750k), but has the result of increasing load factors vs Base Case. Motivated by a need to reduce the subsidy and increase the connectivity offered by the PSO. The previous shared Plymouth – Newquay – London service provides a precedent; of which there are also others.
 - vi. Optimisation of Existing service: This option resolves to hold steady with the current solution (19 seat) but with a re-invigorated route development and marketing campaign. Various aspects include initiatives such as a £100k marketing fund; optimisation of timings for CWL onward connections; through ticketing onto buses at either end and fast track at CWL for ticket holders for a trial period.
 - vii. Incremental enhancement of existing VLY service: This option includes making progress in line with **Route Enhancement Study** recommendations moving towards (a) 31 seat aircraft with two rotations daily or (b) two times daily rotations with a 19 seater and a middle of the day 9 seat rotation.

- viii. Introduction Midday Commercial Routes to Complement the PSO from VLY: In addition to vii, this option also envisages (a) midday new routes out of Cardiff with the PSO aircraft to other destinations (detailed in the ***Thin Route Study*** + £725k VLY NASP) or (b) midday routes VLY to BHD or AMS (an estimated £110k+ route loss for BHD and approaching breakeven at AMS). However hangarage and NASP would also likely be required at VLY (c. £700k & £700k respectively).
- ix. Incremental enhancement of VLY and add independent services from CEG: Under this option incremental enhancements at VLY would be sought. These might be initially an addition of a 9 seat aircraft to augment the morning and evening services with a midday service (e.g. VLY – CWL 2 x 19 + 1 x 9 seat); or an Anglesey departing midday rotation each workday with a 19 seat aircraft to another non-London destination; or incorporating Hawarden (VLY- CEG – CWL) using 3 rotations with a 9 seat aircraft.
- x. Three Airport strategy: Build upon the current arrangements (ix. above) but introduce a 9 seater three times daily from HAW to CWL.
- xi. Hub connections Strategy: This option would be as x. (above) but with (a) 31-seat aircraft triangulated via VLY + CGE services 2 x daily to LHR and 1x daily to AMS or (b) 50 seat aircraft doing the same; plus feeder flights to Cardiff with 9-seater from HAW timed to connect with a CWL - London shuttle. This would require a CWL – LHR PSO and a VLY-CEG-LHR PSO. Requirements would likely include a NASP upgrade in North (and a £3m NASP and new Terminal investment in CEG as detailed in the ***PSO Review Technical Report***) and likely subsidy on North Wales flights and a HAW-CWL PSO. There is the possibility of some private sector joint funding at Hawarden.
- xii. Full Network Strategy: This option is as xi. (above) but with a 19 seat aircraft used for the PSO, and serving an additional service from Anglesey e.g. to Inverness (INV). This could eventually result in 4 rotations each day with the 19 seater with an additional rotation triangulating to Belfast (BHD). The 31-seater would be used to triangulate on LHR with double drop for AMS, or also used to double drop to CDG (these enhancements could be free market or require Route Development Fund support only) from CEG. This would require NASP at both northern Airports. There are many possible permutations.

Applying Different Weights based on Strategic Policy Aims

8.3 Each scenario was then considered against a range of WeITAG appraisal. A synthesis of this analysis, which is set out at greater length in the ***Technical Report into Long Term Future Options for Aviation PSOs in Wales*** is provided in Table 35. We sought to use the following strategic policy aims to guide decision-making by identifying which scenarios performed best under each.

- Minimising Public Outlay
- Maximising Connectivity and Accessibility
- Maximising Economic Benefit for Wales PLC
- Sustainable and Environmental objectives
- Regional / National Integration

- Integrated Strategic Approach

8.4 The results are summarised in the remainder of this Chapter which follows Table 35.

TABLE 35: APPRAISAL OF SELECTED STRATEGIC SCENARIOS AGAINST A RANGE OF CONSIDERATIONS

No	Strategic Scenarios	Changes to the connectivity, frequency and travel times allowed	Direct cost of travel/Value of time per pax	Impact on cost of operation at Anglesey Airport & its future use	Potential Cost to the public purse	Impact on jobs, GVA and the relevant Local economies	Effect on Energy Island proposal + plans to develop infrastructure in North Wales	Effect on the Welsh economy as a whole	Risk	State Aid mechanisms	Nation Building and National Integration	Symbolism of such a move	Environmental	Social and Tourism
1	Base Case/Do Nothing	/	/	/	/	/	/	/	/	PSO	/	/	/	/
2	Terminate Cardiff Anglesey PSO	---	--	+++	+++	-	--	-	-	n/a	--	---	/	/
3	Adopt SET Solution for CWL-VLY	/	-	-	+	-	-	-	-	PSO	-	--	/	/
4	Replace CWL-VLY with SET at HAW-CWL	-	--	+++	/	-	-	-	-	PSO?	--	--	/	/
5	Triangulate Anglesey & Hawarden to Cardiff route	++	+	/	-	+	/	+	-	PSO	+	++	/	+
6	Optimisation of Existing Service	++	+	+	--	++	+	+	-	PSO	+	++	/	+
7	Incremental Enhancement of existing VLY Service	++	++	++	--	++	+	+	-	PSO	++	++	/	+
8	Introduction Midday Routes to Complement the PSO from VLY	++	++	++	--	++	++	++	-	PSO/RDF	++	+++	/	++
9	Incremental Enhancement of VLY and Add Independent Services from Hawarden	+++	++	+++	---	++	+	+	--	PSO	+++	++	/	+
10	Three Airport Strategy	++	++	++	--	++	+	+	--	PSO?	+++	++	/	+
11	Hub connections Strategy	+++	+++	+++	---	+++	+++	+++	--	PSO/RDF	+	+++	-	+++
12	Full Network Strategy	+++	+++	+++	---	+++	+++	+++	--	PSO/RDF	+	+++	-	+++

Commentary: These 12 strategic scenarios endeavour to highlight the most attractive options and the likely support mechanism that will facilitate. Inevitably the most attractive options are more costly to the public purse. Incremental enhancements also score well in balancing risk against cost.

Minimising Public Financial Outlay

8.5 If this is the overriding criterion, then two possibilities present themselves.

Cease the Service

- This will save approx. £1.5m with loss of approx. 27 jobs and loss of £1.4 GVA
- However, it will cause regional disquiet. It would be prudent to prepare for some blowback, and it might be prudent to offer the area compensatory initiatives to mollify the region. These of course would likely not be cost free.

Put a 9-seater on route

- This could save approx. £300k pa but will reduce formal capacity to 8,820 and realistic capacity to about 80% of that (7,000).
- However, it will likely have the presentational disadvantage of increased subsidy per pax.
- This option is unlikely to be operationally available for a couple of years.

Maximising Connectivity and Accessibility

8.6 If the long-term focus is to improve connectivity and accessibility then the following are attractive, especially in light of Brexit strategizing.

Intra – Wales Connectivity – grow PSO route to justify +29 seat aircraft (using enhanced marketing focus) – it may take two (2x 4 year) PSO cycles to achieve. This aircraft may then play a role in some of the following. If access to LHR is possible, consider VLY-CEG-LHR triangulation and feeder flights to CWL from HAW. In 5 years, review if HAW-CEG can be justified/incorporated.

Wales – Rest of UK (RUK) and Ireland Connectivity – use various state support mechanisms to enrich links to London, Scotland, Belfast, S. Ireland, and Crown Dependencies.

Rest of Europe Connectivity – use various state support mechanisms to enrich links to FRA or CDG from CWL.

Long Haul Connectivity – strengthen CWL links with AMS, CDG and FRA and/or support N. Wales links with some of these.

Maximising Economic Benefit for Wales PLC

8.7 This concern suggests the following key objectives guide to decision making:

- The link with LHR is the standout most beneficial achievement; link with other London airport(s) is valuable (e.g. LCY).
- Links with FRA and enhanced links with CDG deliver good benefits.

- Links with RUK and enhanced links with S Ireland are less impressive in terms of economic benefit but easier to achieve and still worth striving for.
- Anglesey centric and Hawarden centric initiatives have been featured below.

Sustainable and Environmental objectives

- 8.8 Because of the current lack of a comprehensive portfolio of Welsh air services, there are very high catchment leakage rates from Wales to English Airports.
- 8.9 Leakage is mostly undertaken by car, although rail is significant on N Wales to Cardiff City, Manchester City and Central London, and Cardiff to Central London; and improvements on these lines will underpin this. However, public transport percentages to Manchester, Bristol, Birmingham and Heathrow Airports are all very low. Reducing the use of the car should somewhat offset the additional emissions from additional flights or larger aircraft.
- 8.10 To be Politically and Financially Sustainable, the North Wales PSO urgently needs to increase patronage and utility to forestall criticism.
- 8.11 Additional tangible benefits such as a link with LHR will gain widespread support in both North and South Wales, especially as public subsidy should be low or not required.

Facilitating Regional / National Integration

- 8.12 If the overriding objective is to stimulate the Welsh regions, then:

NW Wales

- Increase size of aircraft on PSO and stimulate demand through better resourced marketing and selection of suitable carrier with superior GDS and inter-lining and increase opening hours at Anglesey (by only about 1 hour in evening). Underwrite NASP upgrade.
- Base aircraft in Anglesey and seek Anglesey originating destinations in line with report – NHT/LHR; Scotland; IOM, Belfast.
- NE Wales
- If access to LHR is secured triangulate flight with Anglesey; underwrite/facilitate NASP and other upgrades.
- Support other route development opportunities out of Hawarden on back of these investments; Scotland, Ireland and near Europe.
- Consider triangulated VLY-CEG-CWL service, which may help justify larger aircraft.

SW Wales

- If CWL secures slots at LHR then consider sub-NASP 9 seat feeder flight from HAW. Once established consider HAW – CEG. None of this is an immediate prospect.

Integrated Strategic Approach

- 8.13 Secure existing PSO with better resourced marketing, explore CWL involvement in running VLY civilian enclave, lengthen VLY opening hours, and if operator emerges with +29 seat aircraft and persuasive proposition underwrite NASP upgrade (thereby consider longer lead in time for start of enhanced service to permit upgrade). Reward GDS visibility and code-sharing, and additional midday intention to use aircraft in tender Evaluation Criteria.
- 8.14 Consider option in tender to include VLY-CEG-CWL triangulation and accept bids using 19 seat and +29 seat aircraft. Leave option open for 9 seater submissions in tender, although operators may not be ready for this in short term. If persuasive +29 seat submission received, consider underwriting NASP upgrade at HAW. Liaise with AGP and Airbus on these possibilities before issuing tenders.
- 8.15 In Parallel seek slots with LHR and if secured for CWL, consider CWL-LHR PSO and HAW-CWL feeder PSO.
- 8.16 If LHR slots for aircraft in N Wales are secured, institute NASP upgrades and tender for triangulated PSO (there are some tendering niceties that may need to be observed to attain this result).
- 8.17 In medium term, and if some/all of this comes to pass, consider additional uses for 9-seater within Wales such as HAW-CEG and to nearby destinations such as HAW-DUB or VLY-IOM.

9 POSSIBLE ORGANISATIONAL INNOVATIONS IN WELSH AVIATION

- 9.1 One final area we were asked to consider over the course of the Review was whether there were any Innovative Stewardship Models that the Welsh Government ought to be considering. The Aircraft Considerations report listed several possibilities, and possible airport options are discussed in the main PSO Review Technical Report. The options include:
- Public Ownership of Aircraft
 - Joint Ventures: Public Sector Bodies Forming Joint Ventures with the Private Sector
 - Private Finance Initiative
 - Trust Model and Not for Profit Organisations
 - Third Sector Organisations
- 9.2 The possible adoption of SETs for one or more thin PSO routes, and the need to ensure the right aircraft type is available to fly to Cardiff and London Heathrow from North and West Wales offers the opportunity for feeder flights from peripheral Wales, at the very least highlights the need for the Welsh Government to consider its options for how the aircraft required are procured and indeed owned. If there is a significant political commitment to enhancing the network of internal air services and connections to a UK national hub at Heathrow, then as a minimum the acquisition of relevant aircraft types by the Welsh Government (whether purchased or leased), as in the case of Transport Scotland, might help to guarantee key routes are served as required. And if the Aurigny model is adopted, it would also help to ensure that any associated value (e.g. from grandfather rights of Heathrow slots) are internalised rather than being created for a private operator.
- 9.3 By countering some of the market reluctance to acquire new aircraft, especially where the required type is relatively specialised, PSO contenders would then be able to bid to operate and maintain the aircraft type rather than also supply it. Such an approach does offer the potential for the maximum number of potential bidders for a PSO to emerge. However for this to occur it is also necessary to allow bidders sufficient operational start up time to add the type to their AOCs. This can be a challenge for PSO renewals where the provided assets may not be available to allow AOC set-up activities to occur in parallel with ongoing operations by the incumbent. However, this approach may be less suitable where the aircraft required is a more common type than that which may be offered by the market.
- 9.4 Our analysis shows that the Dornier 228NG and its bigger elder brother the pressurised D328 turbo-prop could both be suitable to serve a Welsh PSO network, whilst also having

the capability to accomplish additional 'lunchtime' and possible evening tasks that would be of benefit to Wales PLC.

If the Welsh Government acquired examples of the type, possibly alongside a 9-seater, then more coherent PSO and non-PSO route planning could be undertaken.

- 9.5 The importance of strong marketing of the routes is emphasised in many of the technical reports on Welsh PSO's accompanying this one. In a very real sense Wales PLC 'owns' these routes more than the current operator and hence the branding and marketing of these routes might better be undertaken by a para-entity that could be managed by the Welsh Government (WG), Cardiff Airport, or Isle of Anglesey County Council (IACC). Ideally key stakeholders including the air operator would support its work.
- 9.6 Moreover, the running of the civilian enclave at RAF Valley might also benefit from ownership being consolidated within Cardiff International Airport Ltd, particularly if NASP is required. This would protect IACC being further drawn into areas outside of its core competencies, and existing accountable managers at CWL could have their responsibilities cost effectively extended to cover Anglesey Airport and Welsh PSO route marketing. This arrangement could also provide worthwhile operational cost savings to the WG.
- 9.7 A more unusual option would be for the WG to enter a Joint Venture with an existing airline to form a company that had at its core a mission to route innovate out of Welsh Airports. The resultant organisation could be designed as a 'not-for-personal-profit' rather than a 'not-for-profit organisations' as it would need to make surpluses (or 'profits') to be financially sustainable. However, care would need to be taken to ensure the company was arm's length and did not receive inadmissible state aid to support its operations.
- 9.8 These various possibilities need to be considered in greater depth once a decision has been made about the scale of commitment that the Welsh Government wishes to make to support a PSO service network comprising internal, and possibly, London hub links.
- 9.9 This recommendation is reflected in the final section of the Summary Report (Section 10).

10 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

- 10.1 This Summary Document has endeavoured to assimilate and present the key market analysis, option appraisal and strategic policy evaluations from between 5-600 pages of supporting material in the background technical reports. Given that the work in those reports has taken close to a year, thinking has moved on in a number of areas, and there have been several helpful discussions with Welsh Government officials. Based on the synopsis of all that work in the preceding chapters of this document, we have identified 12 strategic recommendations for consideration by Welsh Government Ministers; we have then assigned them to what we envisage as a series of important future milestones, creating a timeline that can provide the 'next steps agenda' for the Welsh Government to endorse and then implement.

Immediate Recommendations

Bringing Clarity to the Future of the PSO Service

There is a strong economic case for the retention of the PSO service between Cardiff and Anglesey airports based on the fact that journey time savings to business passengers generates GVA that broadly matches the amount of subsidy being invested. In addition, it also supports existing jobs and has the ability to create new ones, particularly in Anglesey, and provides connectivity with South Wales which neither rail nor road can match for the level of financial support offered. Strategically, it provides an important functional and symbolic link that connects north and south Wales, which facilitates easier access to internal markets for Welsh companies.

Extending the Current Contract

The PSO shows clear signs of having the potential to grow further than witnessed to date, but in the short term, it needs a period of consistent unbroken operation, scheduling and pricing optimisation and most importantly, better marketing for that growth to be realised. In addition to these essential steps, avoiding further political speculation about the route's future is important if passenger confidence in, and usage of, the route is to grow.

The findings of this study programme suggest that there are a number of short term steps such as reversing the basing of the aircraft, extending weekday operating hours, adding rotations, keeping fares competitive and increasing awareness of the service that could help to enhance the service's performance and improve the value for money that it already offers to Wales. These could all be tested, with the agreement of the operator, if the existing temporary contract were extended sufficiently to allow plenty of time for re-tendering the PSO.

Our economic impact assessment predicts that if a 19-seat aircraft operation were retained, but with extended operating hours and attractively priced fares, then by 2022, the number of passengers using the route could increase from what we considered to be a reasonable approximation of the normalised baseline in 2015 - circa 11,000 passengers per annum (ppa) - to just over 14,200 or 73% seat occupancy. Adding substantially improved marketing (including promotion through GDS

systems) and a third rotation would achieve 19,150 (at a seat occupancy of 66%), creating an estimated 20 jobs and additional GVA of approximately £290k per annum.

If we were to apply a similar suite of enhancements, but increase aircraft size to 31 seats and remain with only 2 rotations a day on the route, the return is estimated to be almost 18,000 passengers per annum (a seat occupancy rate of less than 60%), with up to 18 jobs created and GVA in the region of £250k per annum.

This suggests that there is a strong case for extending existing temporary contract to 30 September 2018 - long enough for commercial and operational innovations to be trialled sufficiently to inform the requirements of the subsequent 4-year contract. The extension to September 2018 will also provide reasonable time to undertake the tender process – allowing requirements to be fully scoped, and a future operator to be competitively procured and appointed 6-8 months ahead of the commencement of services. This vital lead time will enable the operator to successfully mobilise and undertake preparatory work before taking over the operational delivery.

Any extension to the temporary contract will require detailed negotiations with the current provider, who may seek additional compensation for taking on additional operational or commercial risks associated with some of the innovations proposed (e.g. basing the aircraft at Anglesey during the summer may need weekend positioning for maintenance to alternatives such as the Isle of Man or possibly Caernarfon). But it also provides a unique opportunity for 'real world' trial of these ideas, and generates invaluable empirical evidence for the medium to long term. With this in mind, we support the extension of the current contract.

Immediate Recommendations:

I	Retain the North-South PSO between Cardiff and Anglesey.
II	Extend the temporary contract with Van Air to 30 th September 2018 as soon as possible.
III	<p>In so doing, introduce a series of potential service enhancements and some targeted external support. These should include some or all of the following:</p> <ul style="list-style-type: none">▪ Increase the frequency with which the PSO aircraft is used to 3 rotations per day, either by adding a midday service on the Cardiff-Anglesey route or by identifying with the operator, a commercial non-PSO destination for the aircraft to serve.▪ Discuss a trial with the operator to test the demand for a reversed timetable by rescheduling the PSO and basing it at VLY for summer 2017.▪ Extend the operating hours at VLY as soon as this can be agreed with the RAF, but only if the new schedule requires it.▪ Negotiate any variation required to the current subsidy agreement arising from these changes, subject to an orderly handover being achieved to any new PSO dispensation, especially if it involves a new operator.▪ Increase the provision of marketing support on a match funded basis – we consider this could mean a capped public contribution of up to £25,000 in the period to September 2017 and a further £50,000 between September 2017 and the end of the extended contract period. <ul style="list-style-type: none">▪ A 'micro-networking' marketing plan needs to be agreed between the airline, the airports and other key stakeholders (north Wales' tourism interests, Isle of Anglesey County Council (IACC) and Gwynedd County Council). WG should lead preparation of the plan via a PSO stakeholder marketing group, but once it is complete, delegate responsibility for implementation to a suitable member of the collaboration.▪ Resource commitments in cash or kind to be secured from the marketing collaboration members, and identify a way to manage, coordinate and monitor on-going efforts. These commitments can be advertised in the Invitation to Tender document for PSO bidders where they may be presented as match funded undertakings by the operator.

Short Term Recommendations for the Period to September 2018

Maximising Use of the PSO Aircraft

Realistically, even if the aircraft contracted for the Cardiff - Anglesey PSO were to be based at RAF Valley, it would be difficult to achieve four rotations a day without extending the length of the RAF Valley's current operating hours. Initial approaches to the RAF indicated they might be willing to explore some modest variations on weekdays, providing they were appropriately compensated, but would not be willing to introduce weekend operations due to a high proportion of RAF personnel leaving the base at weekends to return home to family or visit friends. Experience suggests coming to an agreement with the RAF will take some time, and is thus better assigned as a 'short term' rather than 'immediate' recommendation.

The study did, however, identify a number of exciting potential route opportunities the next 4 year PSO contract (October 2018 – September 2022) can be used to explore, especially if the size of the aircraft is increased from 19 to +30 seats. Conceptually, if the implementation of the 'immediate' recommendations has the positive impact on passenger numbers we expect, then the use of a larger aircraft twice a day on the PSO route may ultimately be justified by the end of the next PSO contract period (i.e. 2022) as load factors on a twice a day service would have reached 65%.

However, the big attraction of securing the use of a larger aircraft on the PSO is that it would open up the potential to serve other destinations like a London airport from Anglesey (initially Luton, and eventually when the third runway is open, Heathrow) and similarly other hub destinations like Amsterdam (for which there is evidence of significant demand for a one a day service from North West Wales) or Paris, using the aircraft to add a second rotation from Cardiff. Thirty seat aircraft have the attraction of being pressurised and in some cases substantially quicker than 19 seat equivalents and are therefore more attractive to passengers, are more likely to be accepted as meriting a slot at congested airports and have better route economics at equivalent load factors therefore offering scope for cheaper fares.

Although the prospects for some of these routes (particularly the overseas hubs, may be made more speculative should bids for the next PSO remain based on a 19- seat aircraft, a London flight would remain a possibility, with Northolt a destination that should be explored with the MoD, and there are other domestic options like Belfast or the Isle of Man which may generate interest.

The 2018-22 PSO Tender process

The extension of the current temporary arrangements provides an important opportunity to better adapt the next four year PSO to secure preferred outcomes. These will include:

- seeking a strong operator,
- with a larger aircraft,
- offering credible additional use of the aircraft on non PSO task(s),
- based on a persuasive route development plan that includes increasing patronage and yield, and hence reducing subsidy requests;
- access to extended marketing capability (which may include GDS visibility, interlining, franchising), and
- a persuasive and well thought out marketing plan for extending the commercial reach of the PSO service (geographically and in terms of market segments (e.g. attracting inbound leisure passengers to North West Wales), developing new routes, and working with both Cardiff and Anglesey airports and local stakeholders to optimise the value for money of on-going marketing support.

It also provides a longer lead time before launch to permit optimal preparations and marketing. This includes putting in place new arrangements with the RAF (see below) and marketing the route(s) for several months in advance using micro networking techniques to maximise value for money.

The recommendation around enhanced and sustained marketing provision is based upon the early experience of Highland Airways on the route, where they enjoyed patronage at least 2,000 p.a. more than their successor operators. Highland Airways also enjoyed significant stakeholder support from a range of agencies including IACC, CWL, the Welsh Language Board and deft community micro marketing that was summarised in an appendix to the PSO Enhancement Study. Such techniques (e.g. social media campaigns, competitions with local radio stations, PR stories, cross marketing with attractions and key accommodation suppliers), rather than simply relying on expensive newspaper or poster advertising, are in common use at smaller airports and are recognised as being effective.

Scottish evidence also suggests an uplift in patronage on a PSO, when a higher profile franchise operator took over the route from a standalone airline. There was also evidence from the route when a more 'bolder' yield management strategy, where deeper ticket discounts were offered, had a positive impact on carryings both during Highland Airways' and Links Air's tenures.

Implications of Basing the Aircraft at Anglesey

If, as a result of the 2018-22 PSO tender process, it looks like the operator will be willing to base their aircraft at Anglesey, then a dedicated hangar would likely be a requirement for permanent overnighting. A Rubb-style hangar can be erected within 3-4 months and at modest cost (c£750,000 for a 19 to 31-seat aircraft plus any required groundworks) and has the advantage of being demountable and therefore the capability of being moved elsewhere if needed.

Introducing a 31-seat aircraft would also require the airport at Anglesey to become NASP (National Aviation Security Programme) compliant. This would require level three screening equipment to be introduced and a range of other measures airside to prevent intrusions into the restricted area. Costs are again estimated at c£750,000.

Engagement with the RAF

The RAF is a key partner in the PSO operation providing the airside infrastructure and operations support without which the civil enclave could not operate. Variations to, or expansion of, the current PSO service will require their continued collaboration and in some cases material changes to their existing operating hours. Of the recommendations above, the marketing scheme and probably a single additional midday rotation can be implemented without varying the existing agreement with the RAF/DIO²⁴. Initial indications are that they may be willing to show some flexibility, but new arrangements will take time to negotiate and the aim must be to secure temporary dispensations with a new agreement coming into place at the commencement of the new PSO.

The new arrangements are likely to result in additional costs both in terms of additional charges from the RAF for the use of their airfield and capital costs to enhance the capability and capacity of facilities within the existing or expanded civil enclave. The RAF will be justified in passing on these costs in full if they are solely for the purpose of PSO related air transport movements and outside their current core operating hours; moreover, if not cost reflective, this could give rise to issues relating to illegal state aid. The scale of these costs need to be firmed up as quickly as possible and if accepted, turned into appropriate budgetary provision moving forward.

The position concerning to state aid also needs to be confirmed. Although it is possible that a formal notification may not be needed to cover any additional revenue support costs or capital expenditure on enhanced facilities on de-minimis threshold or SGEI grounds for future accounting officer and audit purposes, it would be prudent to secure DfT and EU confirmation of this.

Airport Governance

For a variety of reasons, preparation for the new PSO may provide the opportunity to review the ownership and operation of the civil enclave at Anglesey. These are set out in more detail in Section 9 of the report, but are associated with operating efficiencies, the availability of marketing resources, expertise in security and a seamless approach to Welsh Government policy and implementation.

²⁴ Defence Infrastructure Organisation

For this reason, we believe serious consideration should be given to asking CWL (Cardiff International Airport Ltd) to take over the running of the Anglesey Airport operation on the Welsh Government's behalf, at a date to be agreed with Isle of Anglesey County Council (IACC) and their contractor Bilfinger. TUPE rules would mean existing staff would move with any transfer of the operating contract.

We are aware that IACC is currently the legal owners of Anglesey Airport facilities built with the benefit of a long lease from the RAF. However, the costs of the operational management are fully underwritten by the Welsh Government and IACC are under-resourced to take on the expanded client role for a major expansion of the civil enclave envisaged in our other recommendations.

Therefore, it would almost certainly be simpler all round if ownership was transferred to the Welsh Government and they took responsibility for finding an operator.

Services from Hawarden

The possibility of developing service offerings out of Hawarden are, in our view, limited until 2022 and beyond, however, there would be merit in discussing the possibility further with APG and Airbus during the extended contract period so that a clear understanding can be presented to tenderers about the facilities and charges that would be offered to a possible PSO operator if access were to be permitted at all.

Our indicative view, prior to these formal discussions, is that securing access to Hawarden is likely to be too expensive, would require significant capital investment, may attract state aid complaints from the nearby Liverpool and Manchester Airports and makes the continued serving of the North-West Wales region by air, which all the evidence from the supporting technical studies indicates is strategically important, more complicated and therefore potentially also more expensive. Furthermore, on a very strict reading of the PSO Regulations we have doubts about whether the services between Hawarden and Anglesey/Cardiff Airports would qualify as a PSO.

In the longer term (i.e. for the PSO period 2022-26) it may be possible to develop a package of key stakeholder support (especially amongst companies based in the relevant enterprise zones at either end of the route, to secure 9-seat direct service linking Hawarden with Cardiff, but that can be for a future review.

More significantly, in a drop-in or triangulated format (e.g. VLY-CEG (Hawarden)-LHR-CEG-VLY) is the most likely way North Wales will secure direct access to Heathrow when its new runway opens, due to the likely limitations that will be imposed on the number of slots that will be released for domestic services. Such a service would generate very substantial positive benefits in terms of connectivity for the wider economy of North Wales and, in our view, should be aggressively pursued by Welsh Government over the next 2 years for commitments from the UK Government and Heathrow during its DCO (Development Consent Order) process.

Access to Heathrow

Both demand and economic impact investigations indicated that access to LHR would score highly from South Wales as well as North Wales. A shuttle service 3-4 times a day would primarily serve the onward connecting market from South Wales, most of which currently drives and parks at Heathrow. Its impact on the point-to-point market heading for central London from South Wales, which will be well-served by improved rail journey times, is expected to be small. But with an overall market we estimate at over 200,000 passengers, securing slots for such a shuttle service from Cardiff to Heathrow would be of great significance economically and ought to be a high priority for the Welsh Government in the short term, with the objective obtaining a commitment, both political and contractual, between the Welsh Government and the UK Government (and arguably also Heathrow) before the Development Consent Order (DCO) application for the third runway is submitted in 2019.

Cardiff Thin Route Support

Our studies identified potential for route development out of CWL both with the PSO aircraft (particularly if it was 29+ seat) as well as for routes defined in the study as 'thin' (less than 50,000 pax per annum). State aid measures above and beyond more normal airport route development mechanisms were examined. In addition to the Heathrow Shuttle above, other hub destinations in mainland Europe like Frankfurt were identified as potentially high performing; especially if a double daily weekday frequency could be reached. A number of domestic routes from Cardiff also look promising and merit further investigation, either because the links currently don't exist or because they would benefit from enhanced daily frequency. These include Manchester, Belfast, Leeds, Newcastle, Aberdeen and Norwich.

Options for securing these objectives include additional PSO's, support from UK Government RACF²⁵ Funding or a time limited route development scheme established and funded by the Welsh Government itself but in line with established UK - EU protocols.

²⁵ The Regional Air Connectivity Fund is a DfT initiative to support route development in conformity with permitted State Aid Route Development Funds

Short Term Recommendations:

- I. Include the option of supporting a 30-seat aircraft in the 2018-22 tender process and ask bidders to highlight any other destinations they might seek to serve if the PSO were to be awarded on that basis.
- II. Issue the Sept. 2018 PSO Tender in Autumn 2017 with aim to award in January 2018.
 - Ensure Tender Options explore both current 19 seat solution and larger aircraft solutions (ideally with additional midday PSO or credible non-PSO route development initiatives encouraged).
 - Ensure Tender Selection Criteria properly weights preferred outcomes and this will include superior patronage development and marketing plans; basing of aircraft; additional use of aircraft; GDS³, interlining, franchising or other benefits. Properly weight quality versus cost in evaluation – we suggest 70% to 30% respectively.
 - Pre-canvas a sample of operators to better inform the options being tendered.
- III. If, as a result of a summer trial in 2017, basing the aircraft in Anglesey and adapting the timetable accordingly looks promising, a site for a hangar will need to be agreed with RAF Valley and a value for money hangarage solution identified and implemented.
- IV. If 29+ seater is successful in tender competition then invoke NASP compliance preparations in parallel with lead in time for a new PSO launch. Refine NASP preparations further as a contingency in the interim.
- V. Negotiate a new agreement concerning the operation of the civil enclave, covering opening hours, additional charges associated therewith, approval to introduce NASP measures should these be needed in the future and permission to expand car parking and other supporting infrastructure (e.g. an aircraft hangar) if required.
- VI. Appoint a project manager for the capital works:
 - Draw-up a timetable for designing, securing approval and having budgetary authorisation to complete the works;
 - Generate architectural and engineering drawings for the planned physical enhancements (inside and out);
 - Specifications for any new equipment associated therewith;
 - Secure planning and building consent for the designs.
- VII. Develop appropriate budget provision– capital and running cost – to cover these items.
- VIII. Assess whether state aid approval is needed and either:
 - Secure DfT and the European Commission confirmation that formal state aid notification is not required; or

- Submit a notification for the full potential expansion under these recommendations and all those that follow within the next 3 calendar months in order that state aid approval is in place before the operator of the new PSO is chosen and the capital works begin.
- IX. Tender and undertake any facilities enhancement work associated with the new operational schedule prior to the new PSO contract commencing.
- X. Explore with IACC and CIAL the practicality of CIAL taking over responsibility of running Anglesey Airport and managing the NASP upgrade.
- XI. Conclude outline discussions with APG and Airbus about using Hawarden for civilian scheduled services:
 - Gain clarity on the need to build a new passenger terminal or re-task the restaurant (which would be less expensive) if NASP was required.
 - Explore APG's appetite for investment in any such civilian air service initiatives.
 - Ensure Airbus is informed and content with how things are 'left'.
 - Seek 'North Wales' slots at LHR3 for a triangulated air service.
 - If SET obtained for HAW-CWL (see below) consider other permutations for the aircraft (e.g. HAW-CEG).
- XII. Pursue the case for slot access from CWL and VLY to LHR strongly with DfT and the wider UK Government.
- XIII. Active support should be offered to CWL for 'thin route' development, independent of, but complementary to, the existing PSO, using either further PSO designations or a formally authorised Route Development Fund (RDF) to bolster standard airport commercial efforts in this area, but also to act as an alternative to discounted APD (Air Passenger Duty) if this power is not ultimately devolved to the Welsh Government.
 - Explore further national and international PSO designations.
 - Develop a formally authorised Route Development Fund (RDF); most probably based on similar methodology to the already approved DfT Regional Air Connectivity Fund.
 - Anticipate and counter competition and state aid complaints from Bristol Airport and establish definitively that Bristol and Cardiff do not share the same catchment area. This is crucial to all potential initiatives in this area. Commission a Catchment Study that supports the case for this assertion.

Medium to Long Term (2019+) Recommendations

Expanding the Network from North West Wales

As outlined above, the new PSO (i.e. 2018-22) is likely to be the opportunity to consolidate any trial undertaken in basing an aircraft in North West Wales. This maximises the opportunities for developing additional routes from there. The subsequent PSO (2022-26) might then be used as the chance to expand the network of routes from Anglesey by adding additional services and possibly introducing a further PSO and aircraft.

Single Engine Turbines

It is arguable that this is also the time for a decision to discount the use of 9-seat Single Engine Turbines (SETs) at higher frequencies on the main PSO route. Of the SETs considered the Pilatus PC12 is the most attractive option but costly to run; the Cessna Caravan offers lower costs but does not provide an attractive passenger environment and only achieves minimal cost savings compared to a 19- seat aircraft if there is sufficient demand to justify three rotations a day. The SETs would also introduce significant constraints on seat capacity and could affect future levels of demand as there is evidence that some passengers will avoid flying on very small aircraft (as happened during Links Air's use of a King Air on the PSO in December 2015).

The use of SETs should only be contemplated if demand drops precipitously or to less than 7,500 passengers on an annual basis and it is considered desirable to maintain the PSO service. With this exception, it is our view that the use of SETs could be restricted to long-term options such as a (HAW) Haverfordwest – CWL to offer connecting flights to a Heathrow shuttle from Cardiff, and to any cross-country options (e.g. HAW - CEG (Hawarden) or Llanbedr to Cardiff as and when these are considered necessary or expedient.

Aircraft ownership Option

In addition to keeping the progress of the PSO under close scrutiny and ensuring its cost-effective delivery, the issue of potential ownership of the aircraft being used should be explored further as option, perhaps with an eye on the 2022-2026 PSO period.

Medium – Long Term Recommendations:

- | | |
|------|--|
| I. | Review future route prospects, when the performance of services provided under the 2018-22 contract becomes clear. |
| II. | Do not pursue SET for current PSO. Revisit SET if CWL gains access to LHR. This aircraft could then provide a useful feeder flight from HAW to CWL, for its shuttle to LHR and also offer the potential to provide a CEG-CWL link. |
| III. | Explore the possibility of a Joint Venture with an operator to be developed to help share risk and allow the Welsh Government to benefit from any acquisition of Heathrow slots. |

APPENDIX A: BIBLIOGRAPHY

PSO Passenger Surveys

- April 2008 - 211 responses. The results are taken from the 2009 Halcrow report. Also, included interviews with rail passengers and those travelling by road between North and South Wales;
- July 2014 - 164 responses. The results are taken from the 2015 Arup report, supplemented by further analysis of the raw survey data;
- September-October 2015 - 100 responses. The completed questionnaires were analysed alongside a full statistical review for the 2016 Enhancement study; and
- 85 responses from a recent Van Air / CityWing 2016 passenger survey are also incorporated into this report.

PSO Route Studies and Materials

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State Aid

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- State Aid S.A. 39466 (2015/N) - United Kingdom Start-up aid to airlines operating in the UK European Commission (2015);
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- Guidelines on State Aid to Airports and Airlines. European Union (2014);
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- Merkert, R. and O'Fee: Managerial perceptions of incentives for and barriers to competing for regional PSO air service contracts, Transport Policy, 47, 22–33 (2016); and
- Evaluation of the Scottish Air Route Development Fund; for Scottish Enterprise, Scottish Government, Visit Scotland & HIAL. Wilson, S. (2009).

APPENDIX B: MEETINGS AND CONSULTATIONS

Organisation	Individuals
Isle of Anglesey County Council	Dewi Roberts, Michael Thomas, Jennifer Clark
Gwynedd County Council	Llyr B. Jones
Pembrokeshire Council	Barry Cooke
Denbighshire County Council	John Rooney
Citywing	David Buck (by Phone and email)
Bilfinger Europa Facilities Management	Donna Williams; Gemma Williams, Lesley Thomas and Angelica Williams
RAF Valley	Sq. Leader Jon King
Special Branch Holyhead Police	Keith Horton
Visit Wales	Andrew Forfar
North Wales Tourism	Jim Jones
University of Bangor	John Hughes
Hawarden Airport - Airbus UK	Paul Bastock, Richard Kinnear and Steve Thomas
Hawarden Airport - Airport Park Group	Carl Poland, Andy McKinney, Darren Williams in person and Caroline Craft by Phone
Caernarfon Airport	Peter Smith (and Roy Steptoe - by Phone)
Aberporth Airport	Jason Cameron (and Lee Paul - by Phone)
Llanbedr Airport	Roy Mann
Haverfordwest Airport	ATC Team and Pembrokeshire County Council
Pembrey Airport	Capt. Winston Thomas and Peter J P Obeysekere
Cardiff Airport	Spencer Birns
Textron	Steve McKenna
Aviation Consultant	Roger Hage

APPENDIX C: STUDY TEAM

RPS Aviation Team

Geoff Dewick.

Northpoint Aviation Team

Chris Cain, Basil O'Fee, Tom Matthews, Richard Matthews, Lesley Smith, Steve Gardner and Jayne Westbrook.

Oxford Rail Strategies

Nigel Fulford and Robin Farmer.

AMEC Foster Wheeler Environment & Infrastructure UK Limited

Alun McIntyre.

Energy Aviation Services

Chris Holliday.

Access to Apex Route Model and Gravity Modelling

RDC Aviation.

Cyfarwyddwr Cyffredinol - Director General



Llywodraeth Cymru
Welsh Government

Nick Ramsay AM
Chair – Public Accounts Committee
National Assembly for Wales
Cardiff Bay
Cardiff
CF99 1NA

2 February 2018

Dear Chair

**UPDATE ON THE PUBLIC ACCOUNT COMMITTEE REPORT WELSH GOVERNMENT
ACQUISITION OF CARDIFF AIRPORT**

I am responding as Additional Accounting Officer to your letter to the Cabinet Secretary for Economy and Transport of 5 December 2017. I am sorry for the delay in so doing.

The new independent non-executive director on the Board of HoldCo was appointed via the Public Appointments Process. This can often take six to nine months to complete. In this case, there were some minor delays to the process agreeing mutually convenient interview dates for all the candidates and the Appointments Panel.

I am pleased to advise you that Stuart Castledine has accepted the offer of appointment. Stuart is a Chartered Accountant and has had a career in the financial services sector in both specialist and general management roles. He was Financial Services Director at Tesco, in which role he led the diversification of the company into retail financial services. His career has also involved working in Kenya where he became Managing Director of The Housing Finance Company of Kenya, and in London where he advised the Board of Post Office Ltd on strategic diversification and ran the former Help the Aged's financial services subsidiary, Intune.

Parc Cathays/Cathays Park
Caerdydd/Cardiff
CF10 3NQ

Ffôn/Tel: 0300 025 6162
E-Bost/E-Mail: andrew.slade@gov.wales



Stuart's previous public service roles have included being a non-executive director of the Welsh Ambulance Services NHS Trust and a Member of the National Assembly for Wales Remuneration Board. He is currently a Director of CityWest Homes Ltd, the Honorary Accountant of the Noah's Ark Children's Hospital Charity, and a member of the ICAEW Wales Strategy Board.

An update on the implementation of recommendations 2, 7, 9 and 10 will be provided in November 2018 as requested.

With best wishes.

Yours sincerely

A handwritten signature in black ink, appearing to read 'A. Slade', with a stylized flourish at the end.

Andrew Slade
Director General
Economy, Skills and Natural Resources Group

Cyfarwyddwr Cyffredinol - Director General



Llywodraeth Cymru
Welsh Government

Nick Ramsay AM
Chair
Public Accounts Committee
National Assembly for Wales
Cardiff Bay

31 January 2018

Dear Chair

Public Accounts Committee Meeting 15th January 2018

I am writing in response to the email from the Clerk to the Committee dated 16th January, further to my introductory appearance before the Committee with Tracey Burke the previous day.

I welcomed the opportunity of an initial discussion with the Committee, and am glad that members found the session useful.

There were a number of follow up actions arising from the meeting that fell to me:

- Provide a note on the relationship the Welsh Government has with the UK Government Digital Service;
- Provide a follow-up note on the tables in the context of modelling the economy as part of the Economic Action Plan ;
- Send a note to update how the proposed powers to give greater autonomy to Transport for Wales are progressing; and
- An assessment of exposure for Wales as a result of [today's] announcement of Carillion's liquidation.

My responses on these points are attached.

With best wishes.

Yours sincerely

Andrew Slade
Director General
Economy, Skills and Natural Resources Group

Parc Cathays/Cathays Park
Caerdydd/Cardiff
CF10 3NQ

Public Accounts Committee 15 January 2018 Introductory Hearing – Actions

The Welsh Government's relationship to/with the UK Government Digital Service

The Government Digital Service (GDS) was established in 2012 to lead the transformation of central UK government services. GDS's primary focus has been on UK Government services and provided an advisory/guidance role to devolved administrations.

Welsh Government has worked closely with GDS on strategy and co-ordination. We contributed to the UK Government Digital Transformation Strategy which referenced work already happening on digital service transformation in Welsh Government. Officials have been active members of GDS's leadership groups – Digital, Technology and Data Leaders - since their establishment. Following the merger of the groups in to the Digital and Technology Leaders, Welsh Government officials have continued to be involved and will be in attendance at the next meeting in March.

We have attended and contributed to GDS Transforming Together events and applied learning into Welsh Government. This month, there is a GDS/Ministry for Housing, Communities and Local Government workshop, which officials will be attending, to discuss how GDS can support local government digital transformation.

On supporting transformation, Welsh Government has learnt lessons from the exemplar transformation projects which GDS worked on with UK Departments from 2012-2015. Welsh Government has adopted GDS's Cloud First strategy and have already successfully migrated a number of our key business applications.

We have developed an Open Data Strategy for Welsh Government and on data science we have worked with GDS and ONS on promoting the data science accelerator programme.

On skills and workforce, Welsh Government has worked closely alongside GDS on its Digital, Data and Technology (DDaT) professions framework. We are implementing the GDS DDaT taxonomy into relevant roles within Welsh Government and are using the taxonomy for our external digital and technology recruitments. Welsh Government staff have attended training at the GDS Digital Academy. At an operational level we regularly collaborate with GDS on a range of capability matters.

On standards and compliance, we implemented an adapted version of GDS's digital service standard in 2014 for the development of our own digital services. We use agile methodologies in transforming our services. We have a range of governance arrangements in place to control spending controls and technology choices.

Welsh Government is a user of the contracts put in place by GDS/ Cabinet Office such as G Cloud and the Digital Outcomes and Specialists frameworks.

On websites, we have used the GOV.UK branding and style guide to support the modernisation of our own Welsh Government website. We are in active discussion with GDS about using their common services platforms.

In summary, Welsh Government has both a strategic and operational relationship with GDS and has done for many years. This is beneficial for both parties and helps support the effective transformation of Welsh Government's digital services.

Tables in the Context of Modelling the Economy as part of the Economic Action Plan

Input-Output tables provide a framework for showing the flows of goods and services in an economy. Input-Output tables for Wales have been produced by Cardiff University, drawing on a small private survey of Welsh businesses. The most recent data are for 2007 and were published in 2010. They have been used by the Welsh Government, alongside other information, to provide estimates of the short-run impacts (actual and potential) of economic events e.g. from a major plant opening or closure.

Used appropriately, robust Input-Output tables can also be used to analyse the industrial structure of an economy and improve the coherence and reliability of economic statistics such as GDP and GVA.

Input-Output tables have several theoretical and practical limitations that mean they are only appropriate for use in particular circumstances and, where they are used, the results should be interpreted with care. In particular, input-output tables should not be used by themselves to assess the longer term impact of economic policies, although they may provide information which can contribute to such an assessment.

Robust data on trade flows between Wales and the rest of the UK are an essential building block of Input-Output tables. There are currently no official data on these flows and these data are not straightforward to obtain because of the close integration of the Welsh economy with the rest of the UK.

Officials will look at the costs and benefits of producing robust Input-Output tables for Wales as well as understanding the sources and quality of data that could be used. We will share the results of this work with the committee.

Update on How the Proposed Powers to give Greater Autonomy to Transport for Wales are Progressing

Transport for Wales (TfW) was established under the Companies Act 2006 and is fully accountable to the Welsh Ministers as a wholly owned subsidiary company limited by guarantee.

The scope of operation of TfW is limited to the activities which the Welsh Ministers may lawfully carry out. It is not possible therefore for TfW to discharge functions which are outside the Welsh Ministers' powers and the Welsh Ministers can not delegate their functions to TfW – unless TfW is created in statute and the powers are transferred via legislation. The Welsh Government therefore retains ultimate

responsibility for transport matters but is able to ask TfW to carry out services on its behalf.

TfW was set up to discharge certain transport functions on behalf of the Welsh Ministers and was remitted, in the first instance, to design and undertake the procurement process for the next Wales and Border rail service and the South Wales Metro, and to develop options for the North East Wales Metro.

Positive discussions are being held with the UK Government regarding the transfer of powers relating to rail franchising and the Valley Lines railway asset.

The Welsh Ministers aspiration for TfW is to enable the Company to take on a wider range of transport functions. To this end, by the end of March 2018, TfW's remit will be extended to include the day-to-day monitoring and management and the demobilisation of the current Wales and Borders rail services franchise, and the mobilisation and on-going management of the new Wales and Borders rail services franchise. The Company will also be remitted to manage the delivery of the South Wales Metro and the North East Wales Metro.

The Welsh Government is considering the benefits of transforming TfW into an operationally independent delivery agent and what activities, projects and services it could ask TfW to deliver on its behalf. This might include the construction of capital transport improvements for walking and cycling, roads or rail, and management of financial support for passenger transport. It might also involve the branding and marketing of services. The Company might also have a role in land purchase and land development to support an income stream. Operational independence will mean that everyday questions and issues would be decided by TfW, so that the Company could respond swiftly and flexibly to emerging situations. The Welsh Government is also considering whether, over the longer-term, there may be further benefits from creating an independent body by statute.

The Welsh Government expects to make a decision by the end of this financial year on next steps so that the 2018/19 remit letter to TfW can incorporate any agreed additional responsibilities.

Exposure for Wales as a Result of Announcement of Carillion's Liquidation

The Welsh Government has been monitoring the situation with Carillion closely since the first profits warning was announced in July 2017. Welsh Government carries out due diligence as a standard part of all tender exercises and monitors the financial situation of all suppliers once a contract has been awarded.

Carillion are a significant provider of outsourced and construction services to the UK Government. They are not a significant provider of services to Welsh Government.

Where contracts with Carillion do exist we will be working with our advisers and the Official Receiver to agree the best way forward to minimise the impact of this situation. All options to minimise any potential delays to delivery will be explored.

We will do all we can to support Carillion workers and supply chains in Wales, including assisting workers find alternative employment and training where necessary through Welsh Government support programmes such as REACT, a project part-funded by the European Social Fund through Welsh Government and delivered in partnership with Careers Wales and Jobcentre Plus.

Carillion feature in one of the bids to run the rail services in Wales and the Borders from October 2018, and to take forward key aspects of the next stage of Metro. The relevant bidding organisation is currently exploring ways in which it can legitimately remain in the process.

Network Rail have confirmed that Carillion's work for them does not involve the day to day running of the railway. We will also be working with them around any involvement of Carillion within their supply chain.

Carillion are currently the Welsh Government's appointed contractor for the delivery of the design for the A40 Llanddewi Velfrey to Penblewin road scheme. We are therefore exploring all options as to how best to progress to the next stages of the project, so as to minimise any delays.

Carillion are also the Welsh Government's appointed contractor for the design of improvements to junction 15 and 16 of the A55. Carillion's profit warning in July 2017 was released following the receipt and assessment of their bid for the project, but prior to the formal award of the contract to Carillion. The Welsh Government paused its procurement process so as to allow investigations to be carried out as to Carillion's financial stability.

Carillion gave assurances as to their stability, and this coupled with the fact that they were only being awarded a contract for design at this stage meant that the Welsh Government, on balance, could not legitimately withhold awarding the contract to Carillion without the potential for challenge under procurement law.

As with the A40, we will be exploring all options as to how best to progress to the next stages of the A55 junction 15 and 16 project, so as to minimise any delays. This includes exploring the possibility of directly contracting with Carillion's supply chain.

With regard to the Superfast Broadband contract with Openreach, it has been confirmed that its subcontractor, Carillion telnet, is not impacted by the issues facing Carillion.

Welsh Government has contacted all Welsh public sector bodies to determine the level of risk/exposure and thus far no contracts or pending contracts have been identified.

Welsh Government has received one invoice to date since the liquidation, and advice is being sought from the Official Receiver on how to handle this. A small number of further invoices are expected.

The Welsh Government is also aware that Carillion are the appointed contractor for the Meridien Tower in Swansea providing the remedial works to make the building fire safe following the Grenfell fire incident.

This is a commercial contract as the building is privately owned. Welsh Government housing policy officials are in discussions with Swansea Council and Carillion to ensure the works do not go on hold.

Economy, Skills and Natural Resources Group

31st January 2018

Agenda Item 3.4

Tracey Burke

Cyfarwyddwr Cyffredinol / Director General
Y Grŵp Addysg a Gwasanaethau Cyhoeddus
Education and Public Services Group



Llywodraeth Cymru
Welsh Government

Mr Nick Ramsay AM
Chair
Public Accounts Committee
National Assembly for Wales
Cardiff Bay
CF99 1NA

8th February 2018

Dear Mr Ramsay

Public Accounts Committee Meeting – 22 January 2018 – Follow-up Actions

I am writing in relation to your request for additional information, following the Committee session on 22 January 2018 on the Supporting People Programme. Please find the additional information requested below.

A. Whether third sector organisations were invited to participate in the stakeholder engagement workshops during the development of the Pathfinder project

The Wales Council for Voluntary Action (WCVA) and Cymorth Cymru were invited to, and have attended, all the pathfinder meetings to date. Third sector organisations also participated in the stakeholder engagement workshops as part of the alignment project, including Barnardos and Cymorth.

B. The grants which form the proposed single integrated grant

We are currently considering creating a new single Early Intervention and Prevention Support Grant in 2019-20 and are working to test new grant arrangements in seven local authorities in 2018-19. The Grants included for 2018-19 are:



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Parc Cathays • Cathays Park
Caerdydd • Cardiff
CF10 3NQ

Ffôn • Tel 0300 0258047
tracey.burke@gov.wales
Gwefan • website: www.wales.gov.uk

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We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding

- Supporting People
- Flying Start
- Families First
- Legacy Fund
- Promoting Positive Engagement for Young People
- Childcare and Play (formerly Out of School Childcare)
- Homelessness Prevention
- Rent Smart Wales Enforcement (formerly part of Independent Living)
- St David's Day Fund
- Communities for Work Plus (formerly the Employability Grant).

C. Additional information on actions to prevent homelessness

***Q1.** What is the Welsh Government's overall perspective on the issues raised by the Auditor General's recent report on homelessness, and what it says about the response of local government and its partners both to the Housing (Wales) Act 2014 and to the Equality Act 2010 and the Well-being of Future Generations (Wales) Act 2015?*

***Q1a.** Does the Welsh Government support the recommendations that the Auditor General has made, and will it be taking any action itself to reinforce them?*

The recently published report from the Auditor General was from our perspective a useful opportunity to use the implementation the Housing Act 2014 as a means by which to consider wider issues concerning how well local authorities are able to manage future demand. The report provides important information and feedback on the progress being made by local authorities and we welcome the findings and recommendations.

The report acknowledges the importance of the Housing (Wales) Act 2014 in placing homelessness prevention at the centre of local authority duties, and the funding which Welsh Government has provided to support implementation. The recommendations are all for local authorities and we will work with the Welsh Local Government Association (WLGA) and local authorities to help secure their implementation.

The addition of £6 million to the Revenue Support Grant (RSG) for homelessness from 2018-19 demonstrates that, in line with the Auditor General's recommendations, Ministers are keen to put these services on a firmer, longer-term footing.

***Q2.** What is the Welsh Government doing to address evidence of a decline in successful prevention work, the growing number of people in temporary accommodation and the risk of a postcode lottery in service provision?*

Our published statistics show an increase in the number of households receiving assistance and, therefore, we do not recognise that there is a decline in successful prevention. Against this increase in demand for services, the evidence suggests that local authorities are actually managing to maintain their rates of prevention. This means more people are being prevented from becoming homeless.

This significantly increased demand on statutory homeless services will have inevitably resulted in an increase to the numbers of people being placed in temporary



accommodation. However, there could be many more factors behind this increase including a more inclusive approach taken by local authorities to providing emergency accommodation, particularly to people who may previously have not been supported, as a result of refinements to guidance and Welsh Government progress visits.

The evaluation of Part 2 of the Housing (Wales) Act 2014 will look at the impact of the legislation on the use of temporary accommodation and we will consider any recommendations arising from the report.

As the Auditor General noted in his recent report it is true that some authorities are further along than others in changing the culture and attitudes needed to become truly preventative. Our programme of engagement, networks and further planned training are there to support them in implementing the spirit and letter of the Act.

Q3. How is the Welsh Government expecting local authorities to use the £6 million funding that it has proposed to add to the revenue support grant to support implementation of the Act?

The additional £6 million is included in the local government revenue settlement from 2018-19. It is a matter for each local authority to determine how they spend this, but Ministers and officials have made clear that this is the secure long-term funding, for which the WAO recently called, and is intended to support delivery of front-line prevention services, as required under the legislation.

Q3a. What sort of changes is the Welsh Government expecting local authorities to make in reviewing and reorganising services with the support of this funding?

It is for each local authority to decide how it utilises the new funding in the Revenue Support Grant (RSG). We will continue to monitor prevention rates and to work closely with local authorities, directly and through the WLGA, to identify and share best practice.

Further funding of £2.8 million is also being channelled to local authorities as a revenue grant to help them build on their statutory prevention work. This will enable local authorities to intensify their efforts to achieve successful outcomes for individuals and families at risk of homelessness or without a home.

Local authority plans for this funding are expected to focus on improving access to the private-rented sector; application of trauma informed practice; strengthening services for people with mental health and/or substance misuse problems (including improved joint working between housing and mental health/substance misuse services); and action to prevent youth homelessness and reduce rough sleeping.



Q3b. *How will the Welsh Government be ensuring that the additional funding is used as intended and not to offset other pressures on core local authority funding?*

We will continue to monitor the number of households being supported to prevent or relieve homelessness through our collection of management data and publication of national statistics.

Officials will work with local government to ensure delivery of effective front-line prevention services, as required under the legislation. We will ensure there are the necessary and appropriate arrangements for monitoring the outputs and outcomes, including via the grant terms and conditions for the additional £2.8m, as well as regular engagement with local authorities through the homelessness networks, working groups and programme of visits to individual local authorities.

Q3c. *How does the Welsh Government expect local authorities to join up wider work on homelessness prevention with the Supporting People Programme?*

How local authorities organise their services to ensure alignment and joint working is a matter for them. However, the importance of support is reflected in our homelessness legislation, which requires local authorities to undertake homelessness reviews and prepare strategies to reduce homelessness by the end of 2018. The reviews and strategies must address the need for support to prevent and relieve homelessness.

The role of Supporting People grant funding in helping the prevention of homelessness is highlighted in the interim report by Salford University and the Auditor General's recent report includes a number of recommendations aimed at improving outcomes in this area, including the advantages of closer integration between Supporting People and homelessness teams.

We will be revising our statutory homelessness guidance in 2018, and will strengthen the advice regarding the need for close collaboration between Supporting People and homelessness teams with shared objectives and planning. The benefits of integration of services and reduction of 'silo funding' underpins the work to increase funding flexibility which may, subject to Ministerial decision on future grant structures, offer further opportunities to join up services more effectively.

Q4. *In the context of the report's findings about collaboration, is the issue of the classification of housing associations - which the Committee has explored previously - presenting any particular challenges in securing their buy in to wider work on homelessness prevention?*

In the course of preparing the legislation for classification of housing associations, officials have explored the duty to co-operate on homelessness prevention and this was not considered to be relevant for classification. The duty to cooperate contained within the 2014 Act therefore remains unchanged and we are satisfied that this will not impact on the future status of RSLs as private organisations.

D. An update on the coding elements of the Hwb programme (website and collection of online tools provided to all schools in Wales by the Welsh Government) and include information on activities on teaching coding in schools more generally not just specifically to the Hwb programme.

We launched *Cracking the Code* our plan to improve coding skills last June. With £1.3 million this Assembly term, we are working with education consortia, businesses, third sector partners, and universities, so more learners develop these skills in advance of the new curriculum. The ability to 'code' is a fundamental skill that all young people need to succeed in the economy, now and in the future.

We have also invested £930k with Technocamps to deliver computer coding workshops to pupils and teachers in our schools. We have committed to support their ESF application so they can deliver an enhanced programme for young people, while our new curriculum is being developed.

Link to the statement and plan:

<http://gov.wales/about/cabinet/cabinetstatements/2017/crackingcode/?lang=en>

BBC news item following Estyn annual report: <http://www.bbc.co.uk/news/uk-wales-42791009>

Our Minecraft for Education pilot aims to inspire first-time coders with Minecraft Code Builder and to use Minecraft for Education to support key priorities in Wales including literacy, numeracy and the Digital Competence Framework. Ten schools in Wales with infrastructure readiness and a desire to participate were identified in conjunction with regional education consortia. Key objectives of this pilot include:

- Raising awareness and highlighting the benefits of coding to headteachers, teachers, learners and parents
- Breaking down the barriers to participation in coding
- Facilitating coding experiences
- Exploring the impact in the classroom.

I hope this information answers the additional questions and is of use to the Committee. If you require further information, please do let me know.

Yours sincerely

Tracey Burke



Shan Morgan
Permanent Secretary
Welsh Government
Cathays Park
Cardiff CF10 2NQ

14 December 2017

Welsh Government Responses to Committee Recommendations

Dear Permanent Secretary,

Thank you again for your letter dated 8 November addressing concerns raised by the Public Accounts Committee regarding the Welsh Government's partial acceptance/acceptance in principle of the Committee's recommendations.

The Committee considered the letter at its meeting held on 11 December and we welcome the constructive and positive approach you have taken to discontinue the practice of partial acceptance/acceptance in principle of the Committee's recommendations.

However, the Committee would like to emphasise the importance of Welsh Government providing clear and detailed narrative to accompany its acceptance or rejection of the Committee's recommendations setting out the Welsh Governments intentions.

We also appreciate your invitation for Welsh Government Officials and Clerks to discuss recommendations while they remain in draft form. We welcome efforts to ensure we have a two-way dialogue that can enhance the Committee's recommendations in the interests of securing improvements to public services. However, we do not believe this should be a matter of course given the need to maintain the Committee's independence and transparency particularly in terms of its role in holding the Welsh Government to account.



However, where the Committee in its recommendations is seeking to influence ongoing policy development or indeed the development of legislation, it may be in everyone's interest for Clerks and Welsh Government Officials to discuss these matters to maximise the Committee's influence and ensure the timeliness of our recommendations. In such instances, I trust the Clerks will be in touch with your Officials.

I look forward to our continued constructive working together.

Yours sincerely,

A handwritten signature in black ink, reading 'Nick Ramsay'. The signature is fluid and cursive, with a long horizontal flourish extending from the end of the name.

Nick Ramsay AM
Chair



Shan Morgan
Ysgrifennydd Parhaol
Permanent Secretary



Llywodraeth Cymru
Welsh Government

Mr Nick Ramsay, AM
Public Accounts Committee Chair
National Assembly for Wales
Cardiff Bay
CF99 1NA

17 January 2018

Dear Mr Ramsay

Thank you for your letter dated 14 December 2017 in response to my proposal to amend the Welsh Government's approach for responding to recommendations made by the Committee in its reports, as set out in my letter of 08 November 2017. I am pleased the Committee found these proposals to be both constructive and positive. On this basis, I have asked the Welsh Government's Corporate Governance Unit to update the relevant guidance to officials, together with the template response letter and template annex relating to the formal response to recommendations included in the Committee's reports. I expect this updated guidance with the templates to be available to officials shortly and, at the latest, by the end of January 2018 to ensure the speedy implementation of this change.

To confirm the approach we intend to follow, we will thereafter:

- employ "accept" or "reject" only as our response to recommendations and no longer use "partial" or "in principle" acceptance;
- set out clearly our rationale for rejecting a recommendation, where this is the case;
- treat recommendations where we agree with the Committee's intention as "accepted" but state if we believe there may be a more effective way of achieving this intention, setting out clearly our reasons for preferring a different approach.



Parc Cathays • Cathays Park
Caerdydd • Cardiff
CF10 3NQ

Ffôn • Tel 0300 025 3289
PS.PermanentSecretary@gov.wales
Gwefan • Website: www.gov.wales

Rydym yn croesawu derbyn gohebiaeth yn Gymraeg. Byddwn yn ateb gohebiaeth a dderbynnir yn Gymraeg yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding

Concerning informal conversations around the phrasing of recommendations while still in draft, I fully acknowledge the Committee's need to be independent and to be transparent and agree that such discussions should, therefore, not become a matter of course but may, from time to time, be constructive and productive for both sides. I will rely on the discretion of officials to utilise such contact only when appropriate.

I am copying this letter to the First Minister and the Clerk to the Public Accounts Committee.

Yours,

A handwritten signature in black ink that reads "Shan Morgan". The signature is written in a cursive style, with a large, stylized 'S' at the beginning. A long horizontal line extends from the end of the signature across the page.

Shan Morgan

Ysgrifennydd Parhaol/ Permanent Secretary
Llywodraeth Cymru/ Welsh Government



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Parc Cathays • Cathays Park
Caerdydd • Cardiff
CF10 3NQ

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1. Introduction

We welcome the opportunity to comment on the Public Accounts Committee's inquiry on care experienced children and young people. Given that all too often children's needs are not prioritised it is appropriate to take time to consider the issues covered by the inquiry and look at how we can all best meet the needs of children and young people.

We know that outcomes for Looked After Children (LAC) do not compare favourably with other children. They are less likely to achieve good educational qualifications, have greater health and housing needs, are more likely to become involved in substance misuse and come into contact with the criminal justice system. However, we must recognise looked after children and their families will have accessed a plethora of universal services and interventions prior to reaching the door of Children's Services and their needs for the future will reflect their history of less access to resources and greater disadvantages prior to entering public care.

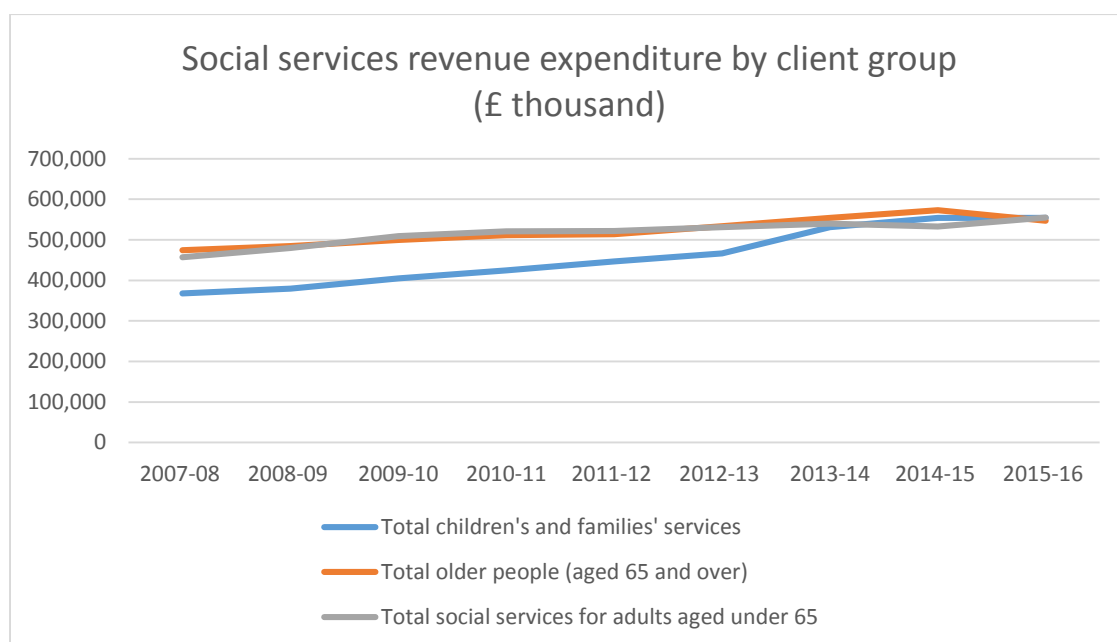
The reasons why children become looked after and their needs while in the care system are complex. Children who are looked after will have experienced forms of loss, abuse and neglect prior to entering the care of the local authority. Ensuring they can achieve their full potential and lead happy childhoods followed by enriching adult lives requires compensatory resource and care from all agencies beyond that provided routinely to their peers. Achieving an impact on the child's outcomes that is both positive and enduring requires their needs to be prioritised by all agencies while they are looked after and, in some circumstances, afterwards. For some children this will be regardless of whether they return home, remain looked after or are placed permanently elsewhere through adoption, special guardianship or residence.

Prior to addressing the four key points laid out by the Committee we will set the background of the current funding and pressures across Children's Services.

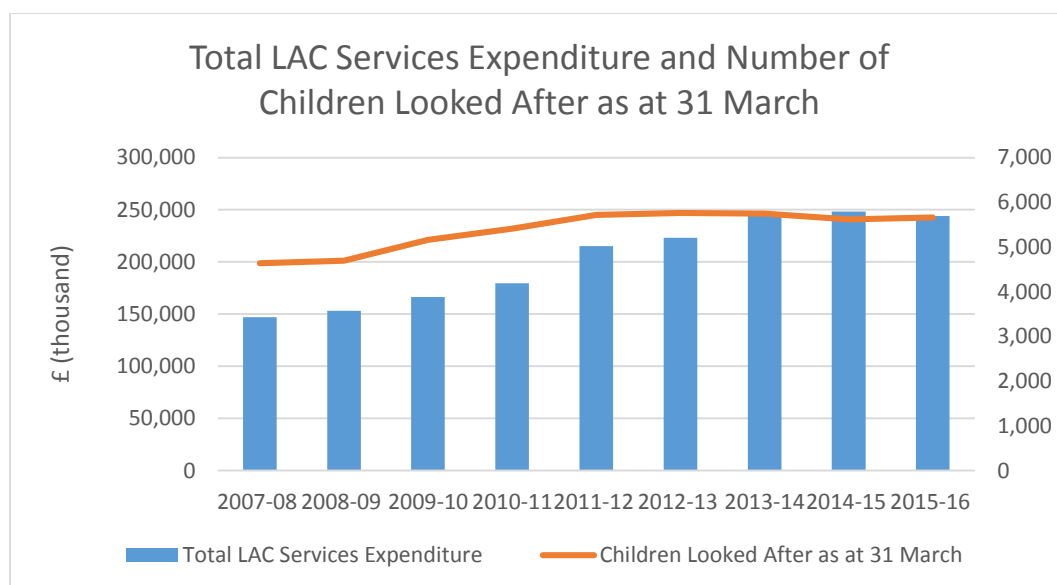
2. Overall Cost

Over the past decade the number of children in the care system in Wales has risen, with a 25% increase in children looked after and a 32% increase in children placed on the child protection register compared with 10 years ago. This has been reflected in the expenditure on Children's Services over the same period.

The graph below demonstrates how the revenue expenditure on children's and families' services has increased over the last 10 years, with a 51% increase between 2007 and 2016. This increase has brought spend on children's and families' services in line with that of expenditure on both adults under 65 and on older people. Children's and families' services now make up a third of social services expenditure:



The most significant area of spend within children's and families' services is in relation to services for Looked After Children which has seen a 66% increase in expenditure over the same period of time. The graph below shows this spend against the number of recorded looked after children by authorities as at 31 March, which demonstrates that both follow a similar trajectory.



This increase in spend evidences the commitment that has been made by local authorities to meet the demands being placed on services by the rising numbers of looked after children. However, this is becoming unsustainable, with most local authorities now anticipating significant overspends on their children's services budgets for this year.

This increase in expenditure comes during a period of significant financial austerity faced across the public sector. In his Financial Resilience Report, the Auditor General has calculated that between 2010–11 and 2016–17, there was a real-terms reduction of £761 million (17%) in aggregate external finance (core grant) for local government. This has had varying impacts across local public services with some areas experiencing real terms reductions of over 50%, and spending at levels not seen since the 1990s. Pressures are set to continue, with the work undertaken for Wales Public Services (WPS) 2025 on Future Pressures demonstrating that pressures in social services budgets drive around 2.9% growth each year, which is around £47m annually up to 2021–22. This includes increases in LAC as well as the elderly population.

The recent draft budget announcement will mean a further reduction in the revenue settlement (Aggregate External Finance) of 0.5% compared with 2017–18. This is in addition to local government's spending pressures which will total around £212m in 2018–19 which will have to be absorbed by councils.

3. Children's Services Pressures

In particular we would wish to highlight the following four key areas where pressures are being experienced in relation to children's services:

Workforce

Child and family social work is challenged by high turnover and vacancy rates and a reliance on agency staff, with demand for permanent, experienced workers outstripping supply (with children's social work now on the national occupational shortage list). The average working life for social workers is under eight years, compared to 16 for a nurse and 25 for a doctor¹. This represents a low return on the investment in training and real challenges for building and retaining professional expertise.

The number of individuals wishing to train as social workers has fallen with colleges experiencing gaps in social work degree courses. The public perception of particularly children's social work is likely to be contributing to the fall in those wishing to train.

Experienced social workers leaving the profession impacts on the quality of services since it is through experience that workers develop the expert knowledge and analytical skills that are vital elements of complex child protection and looked after children casework. Similarly, less experienced social workers often do not have the range of knowledge or skills to comprehensively plan for or directly deliver services to move on children with very complex needs. Since new practitioners learn through interaction and peer support, a shortage of experienced staff also reduces the quality of the 'community of practice' for those entering the profession.

The flow of staff out of the profession impedes a culture of "growing" managers and hence decision makers. Safe decision making and a willingness to safely manage risk in Children's Services is crucial and churn in relation to middle management posts presents high degrees of risk and uncertainty. The pressures exerted on some managers from partner agencies who may be risk averse adds to the burden of personal responsibility and stress levels experienced.

¹ Curtis L, Moriarty J and Netten A (2010) 'The expected working life of a social worker'. *British Journal of Social Work* 40(5), 1628-1643.

A lack of skilled workers reduces service users' and other agencies' confidence in social workers and the gaps left by those who leave cause additional pressure for remaining workers. Continuity of relationships for service-users can be compromised by high staff turnover and can exacerbate the issues children and young people face. This increases particularly the stresses for children in long term foster care and/or residential care.

The nature of social work with children and young people is increasingly complex and focused on the most complex child protection, often with children and young people who have experienced significant trauma from their earliest years. This is particularly challenging for those less experienced social workers, with the knock-on effect being that more people leave the profession earlier. This has meant that for some authorities the use of agency staff has been hard to avoid when trying to recruit experienced staff. This can further destabilise teams, since agency workers have the apparent flexibility to leave difficult situations. Those workers who remain can become more unsettled and may look to leave themselves.

Parts of Wales have seen challenges in retaining staff when better rates of pay have been offered in other areas. For example, some authorities have reported losing staff, particularly across the border, to other local authority children's services placed in special measures who are able to offer better pay as a way of recruiting experienced staff to help improve performance.

External demands and complexities

We are seeing unprecedented pressures on families for a range of reasons. Cuts to those services that previously kept people's heads above water have meant more families are finding their way through to even more expensive child protection services. The ongoing introduction of welfare reforms and a decade of austerity has amplified the challenges for families.

On 12.10.2017 the Local Government Association reported during the ten years 2008 – 2017 a 90% increase in child protection referrals with a 130% increase in care proceedings. Currently in England 90 children a day come into local authority care with a two billion shortfall in funding. The trajectory in Wales is similar with Children's Services increasingly being confined to fire fighting.

As with the rest of the UK the declining emotional well-being and increasing poor mental health of children and young people whilst not fully understood impacts directly on the need for family support as does the increasing number of children being presented with behaviours which families struggle to manage. We can theorise as to the impact of social media, increased bullying, academic expectations and societal fragmentation but the outcome for families is a need for support and an increasingly complex web of difficulties.

Recent high profile scandals have increased our understanding of the likelihood of risk of child sexual exploitation (CSE) and the wider understanding of the imperative to act to protect children and young people at risk of sexual exploitation has increased referrals. We have seen an increase in the number of initiatives that are aimed at early identification and intervention such as the Violence against Women, Domestic Abuse and Sexual Violence (Wales) 2015 Act, the evidence based work in respect of Adverse Childhood Experiences (ACEs), Flying Start and Families First. An unintended impact that we perhaps need to consider is the resulting increase in referrals received by local authorities. Anecdotally, the overwhelming increase in cases coming forward are concerned with neglect with significant increases in domestic violence, issues which are increasingly highlighted as a result of the support that is provided as part of earlier intervention services.

In response local authorities are looking at different ways of mitigating the additional costs arising from these pressures including the use of reserves and additional funding to support the development of preventative 'Edge of Care' Teams. Local authorities have also revisited their prevention strategies as well as their LAC strategies in recent years. This has been a necessity, not only to face the increase in LAC population but also increasing financial pressures facing local authorities and more latterly in order to plan for and implement the Social Services & Well-Being (Wales) Act 2014.

Considerable investment has been put into support teams which work directly with children and young people and their families to work at levels of need at intensive and remedial intervention levels. Most of these work with families to try to prevent children coming into care, work with families to return children home within weeks of becoming looked after as well as working with rehabilitation plans for those children who have been in long term care.

The development of the National Adoption Service for Wales, the collaborative of all 22 local authority adoption services, has placed a focus on improving adoption support services so that the ongoing needs of this group of children, rooted in their early childhood experiences but often unmitigated by their care experience, can be met. Research has demonstrated that within the cohort of children placed for adoption in Wales in 2014–2015 47% had experienced 4 or more Adverse Childhood Experiences (ACES) before they were placed. This places them at the highest risk of later life impact and compares to just 14% of the general population. It is likely that there is a comparable level of ACES in the other groups of children whose needs we seek to meet.

Recent years has seen significant investment in Children and Adolescent Mental Health services (CAMHS) through the Together for Children and Young People Programme (T4CYP), with Welsh Government announcing an additional annual investment of £7.65m in mental health services for children and young people in Wales in 2015. We recognise the fact that CAMHS in Wales are under more pressure than ever before, and in spite of additional investment and staffing, does not have the capacity to meet demand. However, despite some very committed work by individuals within health, local authorities continue to face a challenge in sourcing health services to offer sufficient priority to the emotional and mental health needs of children in care and care leavers. This results in the burden of responsibility being placed on local authority children's social services. There has been a long standing disconnect between the access threshold applied by CAMHS and the presenting emotional resilience needs of looked after children and care leavers. The issue of looked after children and care leavers' rights to an appropriate range of provision to meet their psychological and emotional health needs, when they need it and for as long as they require it, including the transition into adulthood, needs to be urgently addressed on an all Wales basis. There are isolated examples of psychological therapies being deployed to good effect by health services to meet the needs of specific groups of looked after children which, if extended across Wales, could go some way to addressing this.

The requirement for psychological and psychiatric assessment, intervention and support through the Family Courts and then into placements continues to be an area of unmet need. Local authorities are resorting to filling the gap with expensive and often unsustainable solutions to broker between the demands of the courts and the availability of the health services.

Placements

The majority of children who are looked after are cared for by foster carers where children receive positive and nurturing care in stable placements. Residential care also provides many children with positive care and across local authority and agency providers for both foster care and residential care there are committed, enthusiastic and positive carers.

However, the increasing complexity of cases and the growing numbers of children are negatively impacting on both the availability of appropriate placements and the cost of placements. An ageing foster carer population and the increasing costs of providing residential care are draining the sector. Despite the initiatives of the National Fostering Framework, the work of the Welsh Government Residential Task and Finish group, the commitment of local authority placement teams and the work of the Children's Commissioning Consortium Cymru (4Cs) the lack of appropriate placements for looked after children is approaching a crisis position.

Despite local authorities' strong commitment to ensuring placement choice and stability most have struggled to recruit foster carers in sufficient numbers to provide the range and choice of placements needed, particularly for those young people with challenging behaviour and with additional needs. Local authorities report similar shortages in the independent sector. This apparent deficit in the foster carer market raises complex challenges across Wales. A similar deficit is increasingly apparent in residential provision and particularly in the availability of placements for children presenting with the most complex needs.

The table below details the relative spend across local authority placements and independent fostering agency placements for Welsh children placed in foster care in 2014–15.

Provider	Costs	No of Placements	Average cost of placement per year
Local Authority	£51,320,599	2,200	£23,327
Independent Agency	£52,271,037	1,205	£43,378

The provision within independent agencies is spread between not for profit organisations and those seeking to profit. The businesses providing care are multimillion pound enterprises with some being traded on the stock markets and with income for directors and shareholders running into millions.

The pressure of the cost of placements is exacerbated by the difficulties in placing children within or near to their home local authority and the lack of consistency in outcomes for children.

The cost of residential placements is similarly stretched with significant variations. The current lack of placements is contributing to a position where a provider's market is able to charge opaque rates with placements being currently purchased by Welsh local authorities ranging from £2,500 – £16,000 per week. The desperation of local authorities to secure placements has led to children being placed across the UK. The planning for placements becomes lost in the need to place a child anywhere at that point in time. Meaning that good practice in matching and planning for safe and positive placements can be lost in crisis situations.

Our understanding of the costs of providing support to children who exit the looked after system, into adoption for example, is still developing. Work undertaken by the Institute of Public Care for the National Adoption Service in 2017 indicates that the cost of providing support would be significantly less than the current costs of the small level of adoption breakdowns and ongoing placement costs for children whose adoption placement is delayed due to the complexity of their needs.

Legislation and work with the Courts

Although recent years have seen a stabilising of overall numbers of looked after children in Wales a number of authorities are very recently reporting substantial increases in the number of looked after children in their care which places significant pressures on budgets. The last few years have seen a substantial increase in the number of care applications that have been made, with a significant increase in the number of children subject to care proceedings, rising from 1,371 in 2015–16 to 1,642 in 2016–17. Despite this increase cases in Wales were completed in an average of 24.5 weeks compared to an England and Wales performance of 27 weeks. The completion of cases within the timescales and all

the concomitant work is placing substantial demands not just directly on Children's Services but also on the legal teams within local authorities.

The total number of children involved in public law proceedings in 2016–17 was 3,012, an increase of 17% on the previous year. Public law applications have increased over the past three years, with a 24% increase since 2014–15. The main driver in public law work is Section 31 (care) applications. Section 31 applications are made to the court by a local authority where it has significant concerns about the safety or welfare of a child, which saw a 25% increase on the previous year. These issues as well as the expectations from the judiciary continue to add to the pressures and burdens being placed on children's services staff, as well as coming with significant costs attached.

The expectations emerging from legal judgements have created a challenging environment for staff and managers in individual care planning as well as unexpected trends in outcomes which impact on the ability to strategically plan services. A 38% fall in Placement Orders for adoption granted over a two year period was sharply and unexpectedly reversed by a 15% increase in 2016–17.

Of those applications coming before the courts the majority are deemed to be sound applications by both the court and CAFCASS. An enduring criticism of the courts is that the local authority should have sought orders earlier with a perception that the local authorities are failing children by not commencing proceedings. Addressing the reasons for the rising numbers of looked after children and the increasing rate of proceedings extends far beyond the door of Children's Services. The interventions of Children's Services are for the most vulnerable and the most at risk. The challenge is to address why there is such a seeming increase in the numbers of vulnerable and at risk children and young people.

4. The overall cost to and value for money of the range public services aimed at improving outcomes for care experienced children and young people

In March of this year the Welsh Government announced a £1 million St David's Day fund for children who have experienced care in response to the Children's Commissioners 'Hidden Ambitions' report which asked the Welsh Government, local authorities, charities and private enterprise to pledge their support to make sure that young people leaving care have the right support to realise their ambitions. Funding is being made available to eligible young people aged between

16 and 25 and either still in local authority care or care leavers to help them progress towards independence. Whilst this new initiative, and the funding that has been provided alongside, is to be welcomed in recognition that there is still more to be done to be able to support children and young people in Wales and to promote their wellbeing, we do need to appreciate that this is funding for additional responsibilities and does not support in the meeting of on-going pressures being faced.

The WLGA has consistently called for the need to protect and invest in social services as one of our most vital public services, supporting people of all ages across a wide spectrum of need to live as independently as possible and providing valuable protection from harm in vulnerable situations.

We need to acknowledge that whilst the additional funding announced for social services in the budget is helpful this will not cover the expected increases in cost and demand facing social services. The additional funding made available as a result of consequential funding in 2017–18, which included an additional £8m to prevent children from entering care and improve outcomes for those leaving care, from the UK government's March budget was awarded for specific areas of work with restrictions placed on what it could be used for, rather than providing local authorities with flexibility to meet local demand and needs. If part of this additional funding is for new responsibilities then it cannot be said to be funding any existing pressure.

Some children leave care at an earlier age and we would wish to ensure that these children do not have repeat looked after episodes. There is a cost to providing this support that is not easily found in a system that requires a level of 'throughput' in order to be able to 'ration' and 'stretch' scarce resources in the face of changing (usually increasing) need, demand and legal duties. A small amount of the consequential funding has been made available to for adoption support services but it is unclear how the ambition of a consistent adoption support offer will be fully realised even if existing expenditure could be guaranteed and focused.

5. Whether the Welsh Government's desired outcomes for care experienced children and young people are being delivered by the current levels of public expenditure

As outlined in the four key areas of workforce, external demands and complexities, placements and legislation and work with the courts the current and growing pressures within Children's Services are preventing the delivery of positive outcomes for care experienced children and young people. The increasing numbers of looked after children would at any point in economic cycles place pressure on the resources available to meet their needs but when the increase comes at a time of increasingly strained budgets in local authorities the prospect of being able to deliver good outcomes becomes ever more elusive. The structural challenges of placements and the resultant failures to adequately meet children's needs is far from achieving desirable outcomes.

Comparing outcomes across the range of options for looked after children is not easy nor is it currently undertaken in Wales. There are other challenges in this not least of all the ability to track children who are no longer in receipt of a significant level of intervention. In the context of understanding cost and value for money compared to outcomes however it is something that should be considered. There is some relevant research available for England where a wider data set is collected by government and facilitates such analysis. Expanding the data may be something for Wales to consider. This may well assist in the longer term in ensuring that resources are effectively targeted to supporting, enabling and extending the promotion of positive outcomes for looked after children and those who leave the system at various ages and stages.

6. Whether the extent of spending specific to care experienced children and young people is sufficiently transparent across the range of public services

Gaining a full picture of the resources being spent within social care and in other services is challenging.

The spend within local authorities is identifiable within budgets but achieving common understanding and reporting of the spend is less straightforward. While some work has been undertaken to address cost benefit analysis of some interventions recognising all of the financial inputs across the time of a child's involvement with a local authority is at an early stage.

Direct placement costs can be identified. However, breaking down those costs to understand component elements and particularly profit is rarely achieved.

Other areas have shown that whilst pooled budgets in some circumstances may provide potential benefits there are significant complexities around their delivery. In the case of the National Adoption Service for example only one of the NAS regions has committed to a shared funding arrangement for some of its functions; whilst that has achieved some early savings it has not been possible to re-invest this. There are similar challenges in other public services; NAS has been working with the Welsh Government since it extended the Pupil Deprivation Grant to adopted children in an attempt to monitor spend and impact on adopted children. This has not been possible thus far for this grant.

There is considerable data available in Wales focussed on looked after children but tying said data to budgets across universal services is currently immensely complex. Looked after children access all the same services as all other children in Wales and first separating those costs and then identifying those that have arisen because of the looked after or care experienced status of a child is riven with difficulties.

7. Whether public bodies have placed sufficient emphasis on a long-term preventative spend approach, in line with the Well-being of Future Generations (Wales) Act 2015, to maximise the benefits of public expenditure for this group of children.

The Welsh Government has developed grant funded early intervention services, in particular through Flying Start and Families First Initiatives. We believe that there is a need to consider these existing funding streams and how best they can be aligned to facilitate approaches that contribute to this agenda and provide additional support for families, resulting in the maximum prevention / well-being impact. Local authorities continue to face challenges with the use of specific grants, they come with separate and individual accountability and reporting obligations; with authorities having minimal discretion over how the grants are used and over what period they can be spent. They are also subject to change which can make long-term planning difficult. The Independent Commission on Local Government Finance Wales published last year recognised that, “the increased bureaucratic burden falling to local authorities diverts focus and local priorities without demonstrably improving outcomes for service users.” As such consideration needs to be given to the incorporation of existing grants within the RSG, unless there is a compelling case for a time-limited use of a specific grant.

The Early Intervention Foundation's latest analysis, 'The cost of late intervention: EIF analysis 2016', puts the cost of late intervention at almost £17 billion a year, £6.2 billion of which falls directly on children's social care. Councils have found it increasingly difficult to invest in the early help services that can prevent children entering the social care system, and help to manage needs within families to avoid them escalating.

We retain a firm belief that investment in preventative services must be the core priority for Welsh Government, in line with the philosophy of both the Social Services and Well-being Act and the Wellbeing of Future Generations Act and in terms of sound budgetary policy. Many preventative services in local government, such as leisure centres, parks, youth work and community facilities are provided at the discretion of local councils. Unfortunately, in recent years it is these services that have faced the brunt of cuts to local authority budgets as statutory services such as education and social services have been protected.

It is imperative that we stem the decline of local preventative services and that we find a way to make some significant investment into new and existing preventative services. The WLGA has previously called for the establishment of a new Preventative Integrated Care Fund for Wales. This fund, focussed throughout the life-course, would enable some double running of new investment in preventative services alongside 'business as usual' in the current system until savings are realised and reinvested back into the system.

Preventative spend requires an understanding of the root cause of the problem and tackling that, not just the symptoms of the problem. If there is a lack of understanding and a lack of willingness to address the root causes then services will be faced with a never ending and increasing number of these cases for future generations. Simplistically, common root causes if not addressed will exacerbate the situation and if addressed and funded there will still be a 'backlog' of those currently affected which also needs funding until the preventative measures have their full effect.

A further issue is the time that it takes to realise significant savings or improvements in social outcomes. One of the few studies that attempts to quantify the preventative impact of the Social Services and Well-being Act is the LE Wales' Paying for Social Care report. Over a 24-year period the costs of Adult Social care are estimated to increase by 114% in the base line scenario, under the preventative scenario they increase by 108%. Whilst this should provide some savings in the

long term holding off the need for more costly interventions, which are worth realising, these preventative services still need to be supported and developed, requiring additional investment. Whilst the LE Wales report is only based on Adult Social care it does highlight the challenges in realising savings in taking a preventative approach across the whole of social care. It is unlikely that this approach will release the significant savings expected, particularly within the context of increasingly complex needs which need more intense support for longer periods of time.

We have highlighted the fact that local authorities have already placed considerable investment into preventative approaches, however, investment in preventative services requires an invest-to-save approach and there are very real challenges that local authorities face in making this a reality, which is why in some cases local authorities are having to use reserves to be able to make this investment. Local authorities, and in particular those with higher rates of LAC are spending a higher proportion of their total council budget on services for looked after children. As a result, local authorities are being asked to invest in prevention and early intervention on top of an already high spend on LAC services (in real terms and proportionally).

8. Conclusion

Councils are doing their best in very difficult circumstances but services are rapidly becoming unsustainable and nearing breaking point. Councils have done everything they can to respond to the growing financial crisis in children's social care, including reducing costs where they can and finding new ways of working. However, they are at the point where there are very few savings left to find without having a real and lasting impact upon crucial services that many children and families across the country desperately rely on.

Unless urgent action is taken to reduce the number of families relying on the children's social care system for support, this gap will continue to grow. The huge financial pressures councils are under, coupled with the spike in demand for child protection support, mean that the limited money councils have available is increasingly being taken up with the provision of urgent help for children and families already at crisis point, leaving very little to invest in early intervention. Alongside this improvement initiatives such as the National Adoption Service, the National Fostering Framework will not deliver to their full potential unless they are resourced.

The reality is that services for the care and protection of vulnerable children are now, in many areas, being pushed to breaking point. Government must commit to the life chances of children and young people by acting urgently to address the growing funding gap.