Enterprise and Business Committee
PA13

Inquiry into international connectivity through Welsh ports and airports

Evidence from Institution of Civil Engineers Wales Cymru

Response by the Institution of Civil Engineers Wales Cymru to the Welsh Government Enterprise and Business Committee Inquiry into Connectivity through Welsh ports and airports

Background

As one of the major commercial and business organisations concerned with the development and contribution that infrastructure can make to the national economy and social cohesion of Wales, the Institution of Civil Engineers (ICE) Wales Cymru is pleased to make this submission to the Welsh Assembly Government Enterprise and Business Committee Inquiry into Connectivity through Welsh ports and airports.

Although ICE Wales Cymru recognises the importance of port infrastructure to the economy of Wales, particularly those facilities in Cardiff, Swansea and the specialist oil port in Milford Haven, this submission concentrates on the issue of air transport and airports in Wales and seeks to answer the Committee's key questions on those matters within the overall Inquiry Terms of Reference which it understands are as follows:-

The terms of reference for the inquiry are:

• *How important are major Welsh ports and airports, both to the economy of their own regions and to Wales as a whole?*

• *What factors limit realisation of the potential offered by major Welsh ports and airports; what opportunities are available to develop this potential; and how can these be realised?*

• *How effectively do Welsh Government policies support the development of major Welsh ports and airports?*

The ICE Wales Cymru submission seeks to address those terms of reference by responding to each of the key issues identified by the Committee and, where appropriate, raise and comment on other issues which may have a bearing on the Committee's Inquiry into this crucial topic.

The Institution of Civil Engineers Wales Cymru

ICE Wales Cymru is one of the twelve UK Regions of the Institution of Civil Engineers based at One Great George Street, London SW1P 3AA. As the UK's leading Professional Institution for current and aspiring Civil Engineers, ICE recognises that the very focus that it and its members has on the development of the built environment and on key infrastructure projects in

particular, means that it brings and can offer a wealth of knowledge and experience on such issues. This is particularly so in the case of the Committee's Inquiry into Connectivity through Welsh Ports and Airports.

ICE Wales Cymru has long since recognised its crucial role in facilitating and contributing to the debate on the development of key transport infrastructure in Wales. To that end it has co-hosted, with the Chartered Institute of Logistics and Transport, an annual National Conference on Transport and Infrastructure in Wales for the last few years. The proceedings of the latest conference can be found at (www.ice.org.uk//wales/transport2011delegateinfoIn addition, State of the Nation Reports on different sectors of the Infrastructure are published concentrating on specific issues, examples include an overview of the Infrastructure in Wales (www.ice.org.uk/stateofthenationarchive.)

Specific responses to the Committee's questions

Our response takes each of the key issues identified by the Committee and seeks to answer each in turn.

Key issues

• *What role do the Welsh Government and local authorities play in facilitating the development of Welsh ports and airports?*

ICE Wales Cymru Response:

The Welsh Government (WG) and Local Authorities potentially have a crucial role in facilitating the development of Welsh Airports, particularly to encourage economic development and social cohesion.

With a total population of some 3 million, Wales has some 12 airports and airfields that are listed as currently open in the aviation flight guides. They include Cardiff, St Athan, Swansea, Haverfordwest, Welshpool, Caernarfon, Llanbedr, Aberporth, Pembrey, RAF Valley, RAF Mona and the Gliding Site at Talgarth. There is also a heliport owned by Cardiff City Council and operated by Veritair on Cardiff bay.

Of those, only Cardiff offers significant commercial scheduled and charter operations, with limited Cardiff link operations from RAF Valley being the only other scheduled service operations.

But with only 1.2 million passengers Cardiff cannot really be a hub airport in the way that London Heathrow with some 70 million passengers and 33% of its traffic connecting is. Economy of scale and opportunity is key.

The other airfields in Wales serve a variety of purposes, but mostly to meet the needs of Business and General Aviation, including off shore support, Trinity House, Police and Ambulance helicopter operations. In addition the former DRA airport at Aberporth has become a major centre for Un-manned

Air Vehicle (UAV) testing and development whilst the former DRA St Athan has become the focus for MOD and external Maintenance Repair and Overhaul activity.

Other than support to airports such as Haverfordwest by Pembrokeshire County Council, the main contribution made by WG and to a lesser extent the local authorities is in facilitation through such as the Inter Wales PSO air service supported by WG and the fact that the existence and potential development of all the airfields in Wales will be in the local plan. It is also understood that WG has supported the development of both St Athan and Aberporth with their specific operations.

It is interesting to contrast the overall number of airfields, their development and support in Wales (from WG and local authorities) for a population of 3 million with that in Scotland. There, some 15 commercial airfields ranging from Glasgow International to Barra (plus a number of specific General Aviation airfields) serve a population of some 5 million of whom 1 million live outside the central belt, mostly in the Highlands and Islands of Scotland. Of the 11 main commercial airfields, 11 are owned and operated by Highlands and Islands Airports Limited, itself a subsidiary of the Scottish Executive and financially supported by them. The Scottish Executive also subsidise the fares of passengers routing from the outer Islands to the mainland. In addition, the Scottish Executive support PSO services to and within the Western Isles from the Central Belt, whilst Orkney, Shetland and Argyle and Bute Councils all support local air services under PSO with 9 seat Islander aircraft within their regions. The specific aim of the Government and Local Authority support to airfields and air services in Scotland is to promote economic development and social cohesion. Yet by contrast in Wales, for a population of some 3/5ths the size, there is only one PSO supported air service and very limited help to the local airfields, despite the fact that the nature of the terrain and geographic separation of the Country is in part similar.

In addition to the network of locally supported PSO air services in Scotland, Loch Lomond Seaplanes operates seasonal 9 seat charter services from the river Clyde in Central Glasgow to both Oban and Tobermoray on Mull using 9 seat Cessna Caravan float planes.

Whether such active Government and local authority involvement in air services and airfields in Scotland would work in Wales is not known, but regular independent economic impact studies carried out for the Scottish Executive have shown high added economic value from such schemes, which might (budget constraints notwithstanding) work equally well in Wales with the right approach and equipment.

• *What factors have contributed to the decline in business through Cardiff Airport?*

ICE Wales Cymru Response:

A number of factors have contributed to the decline in passenger traffic through Cardiff Airport.

Before going into the detail it is worth reviewing the history of traffic through Cardiff Airport for the last 11 years.

Cardiff Airport Passenger Statistics

Total Passengers

2000: 1,330,277
2001: 1,543,782
2002: 1,425,436
2003: 1,919,231
2004: 1,887,621
2005: 1,779,228
2006: 2,024,428
2007: 2,111,148
2008: 1,994,892
2009: 1,631,236
2010: 1,404,613
2011: 1,208,268* (Provisional)

This data, obtained from the UK CAA, confirms that traffic through Cardiff in 2011 was the lowest ever in the last 11 years at some 1.2 million passengers, having peaked at 2.1 million passengers in 2007.

Looking at the performance of all UK airports since 2007, and particularly since the start of the recession in 2009, it is evident that UK regional airports have suffered disproportionate losses in traffic compared with say the major London airports. Traffic at Blackpool and Durham Tees Valley has been particularly badly hit by the recession by up to 60% reductions. This has been due to a combination of factors. The reduction in GDP due to the recession and resulting disposable income has had a greater impact on leisure traffic than business. It has generally been a characteristic of regional airports that they carry a higher proportion of leisure travellers than those in London. This is particularly true of Cardiff. Historically, Cardiff had enjoyed relatively high levels of charter / inclusive tour services, a market sector that had been particularly hard hit by the rise of the Low Cost Carriers (LCC) in Europe. In general, the bigger an airport's network of services and frequency that in turn will generate increased demand. However, the profile of air traffic in Wales includes a relatively higher leisure content which reduces yields (average net received fares) and can also mean higher seasonality, making year round economic operation for airlines more difficult.

Even before the latest recession and significant increases in APD, Wales already had a very low propensity to fly of 0.58 trips per capita v UK 1.26 as the UK national average (source DfT); whilst some 60% of air passengers from Wales use airports outside Wales, the highest dilution of any airport

system in the UK. In addition according to DfT forecasts, Wales has the lowest forecast trips of any UK region by 2030.

In addition, the change in the market and growth of the LCCs with consequent loss of network services (such as BA and bmi) has meant that the LCCs have brought a far more short term commercial focus to their operations as compared to the Legacy carriers who appeared to show greater commitment to Cardiff Airport and Wales. An analysis of the historic and current operations of Ryanair as Europe's most successful LCC, shows a significant turnover of routes, frequencies and operations with a commercial ruthlessness dropping non performing routes and airports and moving aircraft to other better performing areas. Factors contributing to this are undoubtedly the rise in fuel prices to $120 a barrel and movements in exchange rates over the period with the Euro moving from 1.4 to 1.1 versus the Pound, with consequent impact on leisure passengers costs of travel and buying power.

All of these factors has meant that all airlines have consolidated and moved to their larger bases / hubs where a combination of traffic volume and higher yields reduces their exposure. This has adversely affected airports such as Cardiff. The specific problems of bmi and bmibaby have affected a number of airports including Cardiff where bmibaby had a significant operation.

It is also worth noting that even at a local level; airlines will usually try to serve the airport with the largest potential market. In this context Cardiff Airport faces considerable challenges compared say with Bristol Airport.

A particular problem for Cardiff is that a significant part of the Welsh market in North and Mid Wales finds Manchester, Liverpool and Birmingham more attractive than Cardiff Wales Airport.

Bristol airport catchment area for 1 hour by road is some 1.2 million people. At 2 hours that increases to some 7.3 million, despite competition from Exeter, Birmingham and the London airports at that distance. By way of comparison, the comparative catchment areas for Cardiff are 1 hour 1.2 million people and 2 hour 3.7 million people. Although those are substantial potential volumes of traffic, achieving such market penetration depends on the network and frequency and related pricing that the services from specific airports offer.

In this regard, the consistent failure of WG and the Local Authorities around Cardiff Airport to upgrade the link from Junction 34 on the M4 to Cardiff Airport has adversely affected development of the airport. The current link via the A4226 and up to 10 roundabouts does adversely affect access to Cardiff airport and its relative competitive position, particularly in relation to Bristol Airport.

A brief review of drive times from major population centres in South Wales to Cardiff and Bristol Airports shows the following, with the current road access network to Cardiff Airport:

Swansea (Centre) – Cardiff Airport: 1hr 6 mins

Swansea (Centre) – Bristol Airport: 1hr 38 mins

Carmarthen – Cardiff Airport: 1hr 31 mins
Carmarthen – Bristol Airport: 2hrs 3 mins

So in both the examples, Cardiff Airport only offers potential travellers a 30 minute time advantage compared with Bristol, yet Bristol offers a significantly greater network of services and frequency for travellers to offset the modest journey time disadvantage. Improving the link from Junction 34 of the M4 could significantly help Cardiff airport in its marketing to airlines and therefore its potential contribution to the Welsh economy.

• *How effectively does Welsh Government policy, primarily in the areas of transport, economic development, and land use planning policy, support the development of Welsh ports and airports?*

ICE Wales Cymru Response:

As has been illustrated above, the WG and associated councils' inability to upgrade and improve the road links to Cardiff airport, particularly from the M4 Junction 34, has adversely affected the growth and contribution of Cardiff airport. A point recognised by TBI when they originally bought Cardiff Airport.

There is also little doubt that had the WG and local authorities been as proactive in recognising the potential positive economic contribution from airport and air service development as say has happened in Scotland, then the overall role and contribution of air services to the Welsh Economy could have been enhanced. Rather than just having a single air link from Anglesey to Cardiff, that could have been expanded to include services from West and Mid Wales as well. If operated by the right type of aircraft, such as the Cessna Caravan as operated successfully in Scotland by Loch Lomond Seaplanes (without subsidy), then this could have been achieved highly economically, albeit that there are some operational issues to be resolved with the CAA before such operations were permitted in Instrument Meteorological Conditions (IMC).

Unlike in Scotland, with the use of the Route Development Fund, WG has not sought directly to introduce specific marketing or other support for the development of new routes from Cardiff Airport.

Similarly, (although it is understood that WG is launching a potential consultancy study on differential Air Passenger Duty (APD)) no attempt has yet been made to see WG powers developed to reduce the level of APD as has recently been successfully achieved in Northern Ireland and is being actively sought in Scotland. This could give Wales, and Cardiff Airport in particular, a significant competitive advantage versus English airports and air services. It should be entirely feasible on economic development and environmental grounds (to reduce surface access travel) and by analogy with the old Objective 1 and 2 economic development areas.

ICE Wales Cymru would recommend that WG visit the Scottish Executive to see what lessons could be learned in terms of airport and air service development.

• *How can the Welsh Government develop economic opportunities, for example from tourism, international trade, freight and, in the case of ports, opportunities including the energy and renewable energy industries? What roles do ports and airports, particularly Cardiff Airport, play in the key sectors identified by the Welsh Government?*

ICE Wales Cymru Response:

The significant growth of Foreign Direct Investment (FDI) in South Wales is accelerating the demands for international air transport. Up to 2009, Wales had achieved over £15.9 billion worth of inward investment to the country so far, which has resulted in over 500 overseas companies relocating to Wales. These in turn have created over 215,000 new jobs.

Sectors include component Manufacturing, Aerospace, MRO, Oil & Gas, Steel manufacturing, Bio-tech, Life Sciences, ICT, Finance and Automotive industries all leading the way in utilising the local skilled labour force of Wales whilst having invested many millions in the region to grow their international businesses.

Wales has a significant focus on aviation and aerospace with an Aerospace cluster focussed in the Cardiff area including the British Airways Maintenance facility at Cardiff Airport and major aircraft engine overhaul facility at Nantgarw.

All Welsh Tourism authorities should be pro-active in working with airlines to deliver traffic into Wales with a cohesive WG policy on recognising and backing the significant economic and social contribution that air services can make to Wales whilst ensuring that the more remote communities of Wales also benefit; as is the case in Scotland.

• *How effective is Welsh transport infrastructure and interconnectivity in supporting the development of Welsh ports and airports?*

ICE Wales Cymru response:

In the case of air transport and airports there is really only one current commercial airport in Wales at Cardiff. Although there have been developments with the rail network to serve Cardiff airport from Cardiff, these will inevitably be difficult to justify financially at the required frequency to make them attractive to potential passengers when the current market at Cardiff Wales airport is only some 1.2 million passengers and of whom the vast majority use cars or taxis.

What WG should be considering is a more broadly based inter Wales air network covering Haverfordwest, Aberporth, Llanbedr, Caernarfon and

Welshpool. Albeit that such a network would require some upgrade to the airports concerned to meet CAA requirements, unless operated as charters with fewer than 9 seats. Similarly developments in GPS technology such as the European EGNOS project, could mean that such a network could benefit from enhanced all weather operating capability without the need to invest in expensive ground based navigational aids.

• *Given that ports and airports policy is a reserved matter, how effectively does the Welsh Government engage with the UK Government in the interests of Wales?*

ICE Wales Cymru Response:

WG should engage with the UK Government in Westminster as keenly as the devolved Governments in Scotland and Northern Ireland. Key to that will be WG having a robust policy agenda on such matters which should include the following:

1. Devolve Air Passenger Duty to WG as in Northern Ireland.
2. Agreement that WG can employ a Route Development Fund initiative with UK Government backing for up to three years.
3. Backing for and acceptance of an enhanced inter Wales PSO air service network and other vital air links secured via PSO protection.
4. Policy recognition that Welsh propensity to fly is some 50% of the UK national average and that in the interests of regional equally of opportunity, UK Government grants should be made available for infrastructure projects such as an improved M4 Junction 34 link road which will encourage traffic from South Wales to use Cardiff International rather than a competing English airport. Such a policy would also have significant environmental benefits.
5. Securing UK Government and CAA recognition that use of aircraft such as the single turbine engined Cessna Caravan in Wales on an enhanced inter Wales network of air services could bring significant economic and social advantages and that certification of such aircraft for SEIMC (as in North America and many parts of Europe) should be permitted.

• *What impact do EU State Aid regulations have on the ability of the Welsh Government to provide support, and what opportunities are presented by EU ports and airports policy to support development in Wales?*

ICE Wales Cymru Response:

EU State Aid rules can be constraining but they have been successfully applied and complied with in other parts of the UK and Europe. Indeed it has been said that Ryanair receives more state aid from marketing support and reduced charges from local Chambre de Commerce in France than Air France does for its 48 PSO supported operations into Paris.

There are a number of opportunities for WG to provide support within the EU rules on state aid that would greatly enhance the potential competiveness of air services in Wales and the Welsh economy. These can include marketing support, route development, support for Public Service Obligation (PSO) air services, reductions in landing and passenger charges at WG or Local Authority owned airports. The full extent of potential support should be confirmed prior to any investment.

This area is a potential minefield. It is recommended that were WG to seek to provide enhanced support to airports and air services in Wales that it first finds out from the Scottish Executive its experience and then, if required, employ a specialist Lawyer or adviser with particular experience in this area.

Other factors which may influence air service development and connectivity

Frequency versus capacity

At one time all the air services using Cardiff Airport were either legacy or charter operations.

With relatively small markets that characterise many UK regional airports the key attribute of any air service is for frequency rather than capacity. High frequency in such markets means lower capacity aircraft of say 50 seats. This should enable day trips to be made to specific destinations albeit at the price of increased fares as, say, compared with low frequency, higher capacity, less than daily services by the LCCs, where overall fares are lower due to the economy of scale due to the significantly larger (up to 189 seat) aircraft size but at the price of reduced frequency and higher night stop costs for passengers.

Ideally Cardiff Airport needs a combination of such services with lower capacity high frequency operations on business routes and higher capacity and lower frequency on the primary leisure routes.

London hub air access

A number of options have been evaluated over time to improve connectivity between South Wales and London Heathrow as an alternative to the 3 hours plus via the M4 or rail link connection over Reading. These have included helicopter operations due to the lack of available runway slots at London Heathrow.

A number of opportunities are being evaluated to attempt to increase capacity at the London Heathrow Hub. One option that has been put forward by the Air League and also the AERBT online business travel magazine is the potential use of RAF Northolt to provide UK regional access to the UK's leading hub airport at Heathrow. In the event of future oil and gas development in the Irish Sea together with the opening up of Northolt, WG might wish to consider

encouraging the operation of a Haverfordwest – Cardiff – Northolt service and possibly supporting such services via PSO designation if delegated to WG.

The distance from Cardiff to Northolt is similar to that between Heathrow and Manchester which still justifies multiple services per day and on which more than half the passengers are connecting at London Heathrow.

Runway length and weather record.

Connectivity at airports can be significantly affected by the nature of the infrastructure at the airport including runway length, any obstacles or terrain issues and navigational aids available as well as the weather records of the airport and its resulting service regularity.

It is surprising therefore that more is not made of the fact that Cardiff Airport offers a 2392 metre runway length and a relatively good weather record in part due to its coastal location some 325 feet above mean sea level with primary approaches over the sea. The longer runway means that Cardiff Airport can offer airlines the ability to use larger more efficient and longer range aircraft in contrast to Bristol Airport.

By way of comparison the runway at Bristol Airport is 2011 metres long at a height above mean sea level of 609 feet with inevitable impact on the weather record.

ICE Wales Cymru

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Footnote:

- The Institution of Civil Engineers (ICE) was founded in 1818 to ensure professionalism in civil engineering.
- It represents 85,000 qualified and student civil engineers in the UK and across the globe and has over 4,200 members in Wales.
- ICE has long worked with the governments of the day to help it to achieve its objectives, and has worked with industry to ensure that construction and civil engineering remain major contributors to the UK economy and UK exports.
- For further information visit: ice.org.uk/wales