SUBMISSION TO ENTERPRISE & BUSINESS COMMITTEE INTO INTERNATIONAL CONNECTIVITY THROUGH WELSH PORTS AND AIRPORTS

ASSOCIATED BRITISH PORTS, SOUTH WALES

1. Introduction

- 1.1. This submission is made on behalf of Associated British Ports (ABP). ABP is the UK's leading and largest ports group with 21 port facilities and other transport related businesses around England, Wales and Scotland. ABP is a privately owned company.
- 1.2. ABP very much welcomes this Inquiry into Ports in Wales and the interest it shows in a sector of major strategic and economic importance.
- 1.3. Associated British Ports operate five major ports in South Wales; Newport, Cardiff, Barry, Port Talbot and Swansea. These ports are important gateways for trade and also support major manufacturing on sites contiguous to the ports, such as Corus, Dow Corning and Celsa. The five ports lie on the northern shore of the Bristol Channel and are established as major ports in South Wales but also importantly as a key hub for servicing a hinterland that extends to the Midlands, southwest of England, M4 and M5 corridors and London.
- 1.4. Seaports are unique assets in providing multi-modal hubs to users, combining connections between road, rail and sea. The South Wales ports all have direct links to the national rail network, the UK motorway system, combined with deep-water berths able to accommodate some of the largest ocean going vessels.
- 1.5. In addition to being nodal points for import and export of cargo, ports provide locations for value added employment and investment from logistics providers through to manufacturers and retailers, and form part of the regional offering for attracting both UK and foreign investment. Ports close to the origin or destination of cargo can also minimise the environmental impact by utilising shipping, widely regarded as the most environmentally benign mode of transport.

2. Contribution of Welsh ports to the economy

2.1. The importance of ports to the economy is identified in a recent research paper "Associated British Ports and the Welsh Economy" (Welsh Economic Research Unit, Cardiff Business School and Welsh Enterprise Unit, University of Glamorgan – June 2004, updated 2009) which is attached for information. The research provides some key findings that illustrate the importance of ports as economic drivers for the Region. The fact that the activity of ABP and its tenants in South Wales directly and indirectly support £79.8 million per annum with a GVA of £34.2 million, and the activities of ABP's port tenants account for an estimated 9,711 FTE jobs, with a direct and indirect output of £2.78 billion and GVA of £902.5 million (2% of the Welsh total) clearly illustrates the salience and potential of the seaport.

- 2.2. The South Wales Ports are key assets to the region and the industries within, and have capacity for substantial growth bringing employment and inward investment to Wales.
- 2.3 Welsh ports have evolved in recent times, driven by the increasingly global nature of trade and the economy as well as the decline of the U.K. manufacturing sector and mining industry in Wales. In the last decade trade has generally grown steadily in the South Wales ports, closely reflecting prevailing economic conditions. There are a number of key areas in which there is potential for substantial growth in the scale and range of trade in South Wales, most notably in the energy sector and container traffic connecting Welsh ports with other European countries

3. Local Development plans

3.1 ABP believes that it is essential that the strategic importance of ports is recognised through local development plans and regional plans. This submission provides further detail of the contribution of ports to their local and regional economies, and their role in stimulating inward investment.

4. Wales Freight Group

4.1 ABP has been an active member of the Wales Freight Group that have worked in partnership with the Welsh Assembly Government to publish the 'Wales Freight Strategy', to deliver a "modern, efficient freight transport system in ways that will support and balance economic, social and environmental objectives, in line with the Wales Transport Strategy". The purpose of the strategy is to assist regional transport consortia in the development of regional transport plans and this document should form part of the policy framework for the development of Welsh Ports. ABP believes the establishment of both the Wales Freight Group and the Welsh Ports subcommittee has been a very positive step for developing freight strategy in Wales.

5. Road and rail links

- 5.1 Whilst recognising the need for major improvements to the M4 to ensure adequate connections to/from South Wales are maintained, particularly the restrictions imposed by the Bryn Glas tunnels, ABP is extremely concerned that the current proposals for the new motorway to bisect Newport Docks will adversely impact upon trade through the Port of Newport. This submission has already highlighted the socio-economic contribution of ports to their local economies and any scheme proposed should not adversely affect existing trade or future development prospects. ABP is fully engaged in the consultation process with WAG on this subject.
- 5.2 ABP would also like to highlight the strategic importance of a number of local road enhancement projects. In particular, the completion of the Port Talbot peripheral distributor road, the Fabian Way infrastructure enhancement works at Swansea and the Eastern Bay Link Road in Cardiff all of which help to improve transport infrastructure to the immediate hinterland.

- 5.3 It is essential for the continued development of ports and sustainable freight networks that rail freight paths are retained and protected. It is also vital that work involving Network Rail, Freight Operating Companies, Government and other key stakeholders continues to remove capacity and capability constraints for freight on the rail network. These include removing freight network pinch points (in particular the Severn Tunnel) and addressing gauge issues in Wales.
- 5.4 The EU Trans-European Networks (TENs) system should be considered to support the connectivity between ports and the hinterlands, particularly links extending beyond Wales.

6. Cruise Wales

6.1 ABP is an active member of Cruise Wales, a public-private sector partnership, which has been established to promote and market Wales as a cruise destination to international passengers. The partnership is made up of representatives from government, tourism and port organisations from all of the major ports in Wales. Cruise ships have potential to bring economic benefits to the region and its tourist based economy. This is a good example of how Welsh Government can develop economic opportunities in the key sectors they have identified.

7. Environmental benefits of short sea shipping

7.1 Sea transport is recognised by many as the most environmentally benign mode of transport and further reduces congestion on the busy road and rail infrastructure. Through the Wales Spatial Plan, Local development plans and other policies the strategic importance of ports and their ability to facilitate inward investment and catalyse sustainable economic growth should be recognised. Applying a "presumption in favour principle" to consents for developments in and around ports that encourage this would make investing in Wales more attractive.

8. Development opportunities

- 8.1 The brown-field development land within and directly adjacent to the port estate provides prime sites for locating energy generation plants, particularly for renewable energy schemes. A number of such developments have recently received planning approval including the world's largest biomass power plant at Port Talbot, which will import feedstock using the Tidal Harbour.
- 8.2 There is also an opportunity to develop facilities for energy production on ports and contiguous sites, for example for biofuel production sites such as the bio-diesel production facility that recently received planning approval at the Port of Cardiff. Ports will also play a crucial role in supporting the development of offshore energy resources, providing construction sites and supply bases for exploiting wind, wave and tidal power. One of the zones identified by the Crown Estate for Round 3 of the offshore windfarm-leasing programme lies a short distance from the South-Wales coast. Documents such as the recently published Bioenergy Action Plan for Wales fail to recognise the advantages offered by ports in the energy supply chain. All aspects of energy policy in Wales should reflect the strategic importance of ports

9. EU State Aid

9.1 The EU State Aid regulations do not adversely impact the development of ports in Wales. The ports sector is a market-led sector benefitting from substantial investment from the private sector and EU State Aid Regulations are not presently a barrier to the development of Welsh Ports.

Associated British Ports: South Wales Economic Impact Assessment

WELSH ECONOMY RESEARCH UNIT Yr Uned Ymchwil i Economi Cymru

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Cardiff Business School
Colum Drive
Cardiff
CF10 3EU

Contact:

Prof. Max Munday

Email: mundaymc@cf.ac.uk
Tel: 02920 875089

www.weru.org.uk

1 Associated British Ports: impact assessment

1.1 Introduction

- 1.1.1 Associated British Ports (ABP, South Wales) operates the ports of Swansea, Port Talbot, Barry, Cardiff and Newport, with the headquarters located at Queen Alexandra House close to the Cardiff Bay Barrage.
- 1.1.2 These five ports play an important role in the contemporary Welsh economy providing port services, and also with ABP property hosting a wide variety of tenants encompassing a range of manufacturing and services sectors. For many of these businesses being in close proximity to port infrastructure is critical to successful operations, and with other businesses directly dependent on ABP for port-related commercial services.
- 1.1.3 The commercial land available within the curtilage of the five ABP ports represents an important element of the location offer of industrial South Wales (i.e. providing 830ha of commercial and industrial space). The five ports also play an important role in supporting Welsh overseas trade and domestic trade with 15.6m tonnes of goods going through the ports in 2007 (13.9m tonnes of imports and 1.7m tonnes of exports). The nature of economic activity associated with ABP South Wales operations is complex. Consequently the scope of economic activity supported by ABP is complex.

1.2 Research objectives

- 1.2.1 This brief report is the second analysis of the economic impact of ABP operations in Industrial South Wales. During 2003-04, the Cardiff Business School undertook an economic impact analysis of ABP activity. This report works to revise the conclusions of this first report focusing on the estimated economic impacts associated with direct port operations, and then with a further estimate of the economic activity supported directly and indirectly within the five port boundaries. The objectives of the report are then to:
 - Examine the economic impact of ABP core port operations on the contemporary Welsh economy.
 - Provide an estimate of the economic activity directly supported by the tenants of ABP in 2007, and the significance of this activity in the context of the contemporary Welsh economy.

1.3 Structure of the report

- 1.3.1 The remainder of the report is structured as follows. In the second section is provided a review of current ABP operations in industrial South Wales.
- 1.3.2 The third section of the report discusses the activities undertaken by tenants of ABP, and the method employed to gain an estimate of the employment and output supported by these tenants.
- 1.3.3 The fourth section then examines how far the direct port operations of ABP and their tenant set support activity elsewhere in the Welsh economy. This section explores, for example, how through local purchasing of goods and services, ABP supports output and employment in the regional value chain. Moreover, the employees of ABP and their tenants spend a proportion of their wages and salaries on goods and services produced in Wales, and hence they also support indirect economic activity in Wales.
- 1.3.4 The fifth section concludes with a discussion of the significance of port infrastructure to Wales based on the impact assessment, and then highlights the linkages between port infrastructure and the development needs of the Welsh economy.

2 ABP South Wales: Core Operations

2.1 Introduction

2.1.1 This section examines the core operations of ABP in South Wales, and concludes with an estimate of the direct economic effects associated with the organisation's operations in 2007. This is followed in the next section by an examination of the activity undertaken by the tenants of ABP.

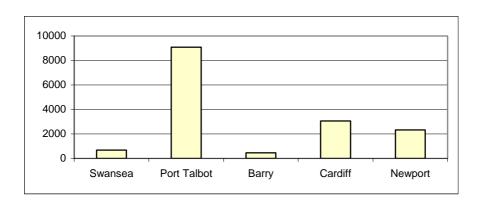
2.2 ABP: Main Operations

- 2.2.1 ABP South Wales is one part of the Port Division of ABP Holdings Ltd. ABP South Wales activities involves the management and operation of the ports of Swansea, Port Talbot, Barry, Cardiff and Newport. ABP income in South Wales is derived from several sources including:
 - harbour dues connected with port operations, and calculated from weight of cargo handled;
 - pilotage fees paid by ship owners;
 - payments in connection with storage of goods;
 - lease of port property, together with property sales.
- 2.2.2 The nature of individual port operations varies greatly. General port operations include cargo handling, engineering (specialist maintenance of cranes, lock gates, roads and other infrastructure), security, warehousing and storage, and dredging.
- 2.2.3 Typically in the immediate hinterland of each port are organisations dependent in part on port activity including ship-brokers and agents, and then freight forwarders, stevedoring firms, towage firms, dry dock operators, ships chandlers, transport and warehousing operators, and construction industry firms. Below is a brief profile of the activities of each port.
- 2.2.4 Swansea is the western-most of ABP's South Wales ports, and has three docks (Queen's, King's and Prince of Wales). Much of the port's trade focuses on north and west Europe, the Mediterranean and Ireland. During 2007 the port handled 682,000 tonnes of cargo comprising 521,000 of imports and 161,000 of exports. Key cargoes included fertilisers, aggregates, cement/clinker, steel and forest products. Swansea port also has a container terminal. The port offers 30,000sqm of enclosed and 16ha of open storage, and features a range of cargo handling equipment. Swansea can accommodate vessels up to 30,000 tonnes deadweight.

- 2.2.5 Port Talbot's main asset is a tidal harbour, one of just a few ports in the UK that can take vessels of up to 170,000dwt. Adjacent to the port is the Corus Port Talbot Steelworks. The deep water port facilities are vital to its operations. Key cargoes are coal and iron ore for Corus. The port also deals with a combination of self discharging vessels, and normal bulk carriers which are unloaded by dockside cranes. Port Talbot docks takes vessels of a smaller size for shipment of processed slag. During 2007 imports into Port Talbot were nearly 8.8m tonnes, with exports of 321,000 tonnes.
- 2.2.6 Barry docks sits adjacent to the Barry chemicals complex. During 2007 the port handled 456,000 tonnes of cargo, 370,000 tonnes of which was chemicals. The port also handles containers, dry bulks, and forest products. Barry also hosts large tank storage facilities closely tied to the Dow Corning and wider petrochemical complex at Barry. Groupe Samat operates a terminal at Barry Docks for Dow Corning, while Scott Timber imports timber into Barry for pallet production. Another key port player is Vopak which provides 45,000 cubic meters of liquid bulk storage linked to the Dow Corning chemical complex.
- 2.2.7 Cardiff port deals with a wide range of cargoes including containers (Cardiff Container Terminal), steels, timber, both dry and liquid bulk products. Cardiff also has cold store facilities for fruit and vegetables. This port has seen extensive investment in state of the art storage and cargo handling equipment (Cardiff Distribution Terminal), and now attracts some cruise liner traffic, with the port close to Cardiff city centre and surrounding attractions. In terms of storage, Cardiff features over 54,000 square meters of transit, distribution and steel storage sheds. During 2007, the port handled over 3m tonnes of cargoes and with petroleum products and steel making up nearly two thirds of handled cargo.
- 2.2.8 Finally, Newport is the eastern most port of ABP in industrial South Wales. The port handles a wide range of cargoes including coal, agri-bulks, aggregates and minerals, steel, scrap and timber. During 2007 the port handled 2.33m tonnes of cargo, and with steel imports/exports accounting for around 42% of handled cargo in tonnage terms. Sims Group has two specialised facilities at Newport docks for recycling and exporting metals, and the port offers 25,000 sq m of covered storage for handling steel products.
- 2.2.9 Figure 2.1 shows the total tonnages of cargo going through each of the ABP South Wales ports in 2007. More details are given in Figure 2.2. The largest volumes of products handled were iron ore (i.e. around 5.8m tonnes into Port Talbot), coal and coke (around 2.8m tonnes also into Port Talbot), and chemicals/oil and petroleum (just over 1.8m tonnes and largely inward cargoes to Cardiff). Exports in 2007 from ABP South Wales ports were around 1.7m tonnes, of which 21% was steel exports (primarily out of Cardiff).

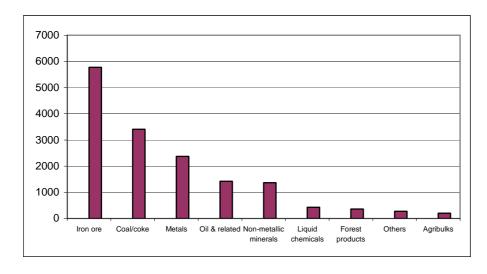
and Newport), and with a further 34% being scrap exports also largely from Cardiff and Newport. Metal exports from the region were expected to top 1m tonnes in 2008.

Figure 2.1 Volumes of Cargo at ABP South Wales Ports, 2007 (000s tonnes).



Source: Associated British Ports

Figure 2.2 Analysis of South Wales ABP Port Tonnages by Product (000s tonnes)



Source: Associated British Ports

2.2.10 In total the five ABP ports handled 15.6m tonnes of cargoes in 2007.

2.3 ABP Employment and output

- 2.3.1 ABP supports a great deal of activity on its property (see later). However, the focus in this section is on ABP's core activities rather than those of tenants within the port boundaries. The financial details outlined below form one part of the overall impact assessment discussed in later in this report.
- 2.3.2 ABP directly employs 201 (full-time) people in Wales. The majority of these are at Cardiff (81), followed by Newport (56), Swansea and Port Talbot (41)

and Barry (23). However, this total does not include 95 people working for the UK Dredging subsidiary of ABP (mostly as crew on vessels). ABP Marine employs pilots at both Barry and Swansea which service the wider South Wales network of ports. In the analysis that follows in this report we do not include the activities of UK Dredging.

Table 2.1 ABP South Wales: Summary of Operations

	2003	2007	
ABP estimated output (sales)*	£42.3m	£43.4m	
Employment (excluding UK Dredging)	212	201	
Gross payroll costs	£7.54	£8.19m	
Capital spending	£12.10	£6.60m	
Operational spending (non- wage)	£16.40	£16.65m	

^{*}Note this excludes income from property development and sales.

Source: Associated British Ports

- 2.3.3 During 2007 ABP South Wales estimated gross output (i.e. its turnover/sales) was £43.4m. Of this total £27.6m represented revenue from core port operations (i.e. from companies and ship owners in the UK and overseas), and with £12.6m from port-related property income. This latter represents incomes from ABP tenants. In 2007 ABP had 348 separate tenants (Table 2.2), the majority of which are in Barry (103), Cardiff (101) and Newport (78), and then with smaller numbers of tenants at Port Talbot (37) and Swansea (29).
- 2.3.4 There was a smaller amount of UK and overseas sales (£3.2m). Table 2.1 provides a summary of financial and employment information for 2007, with comparative data used in the initial report undertaken for ABP in 2003-04.

Table 2.2. Summary: ABP South Wales Ports Tenant Numbers 2003 and 2007 and Change

Port	Tenants 2003	Tenants 2007	Change%
Barry	114	103	-9.6
Cardiff	74	101	+36.4
Newport	66	78	+18.1
Port Talbot	55	37	-32.7
Swansea	26	29	+11.5
Total	335	348	+3.9

Source: Associated British Ports

- 2.3.5 Key items of ABP spending relate to gross payroll costs, capital spending and operational (non-wage) spending. Gross payroll costs were around £8.2m in 2007, with capital spending of £6.6m.
- 2.3.6 Part of the capital spending for the year related to an extension of the Sims recycling site at Newport, and the development of a waste electrical and electronic equipment plant that will allow the site to process over 100,000 tonnes of electrical goods per annum. This new infrastructure was developed jointly by Sims and ABP. Other investments during the year related to infrastructure improvements for Corus at Port Talbot.
- 2.3.7 Total operational (non-wage) spending was £16.6m with key items being dredging costs, engineering services, stevedoring (sub-contracted), maintenance materials and security.

Table 2.3: ABP Spending Summary, 2007

Purchases	£000s
Purchased materials	773
Electricity and water	1,000
Business rates & insurance	2,132
Dredging	1,633
Sub-contracted services and labour	4,334
Other items (including depreciation & property cost of sales)	6,777
Purchases ex capital spend and employment costs	16,649
Capital spending	6,600
Direct labour inc OT, NI +other staff costs	8,186
Total purchases	31,435

Note: Excludes the activities of UK Dredging

Source: Derived from data provided by Associated British Ports

- 2.3.8 It is important to recognise that these costs relate to ABP South Wales ports.

 ABP also operates the UK Dredging company in Wales which has an estimated sales from Welsh operations of £11.1m in 2007.
- 2.3.9 A series of points can be made about the spending patterns of ABP. The nature of the demands of the company mean that it is able to source many of its purchased goods and services in the local economy. For example, taking the capital spending (£6.6m) together with the non-wage operational spending of £16.6m together, it is estimated that over 70% of this joint spending is with Welsh suppliers of goods and services. For example, services such as stevedoring, engineering and security are wholly sourced in the local economy, as are equipment hire and dredging requirements. Moreover, in the case of maintenance materials it is estimated that 75% is

purchased in Wales, growing to 80% in the case of cargo handling equipment. These local spending patterns are a key factor that drives the indirect economic impacts of ABP activity. For example, this local spending supports employment and incomes elsewhere in the regional economy. An important additional issue linked to the later economic modelling is that ABP tends to spend money locally with relatively labour intensive industries.

2.3.10 We return to estimate the impact of ABP spending on the regional economy in section 4 of this report.

3 Scope and Scale of activity undertaken by ABP tenants and Estimates of their Employment, Output and Value Added

3.1 Introduction

- 3.1.1 There is a wide variety of activity undertaken on ABP property in South Wales. Moreover, some industries adjacent to port infrastructure are heavily dependent on the port, such that absence of the port and port services would directly threaten the continuation of operations in South Wales.
- 3.1.2 To illustrate the diverse range of activity undertaken on ABP property Table 3.1 highlights the nature of 5 very different tenants on each port site.

Table 3.1 ABP Tenants: Examples of Activity

ABP Barry	ABP Cardiff	ABP Newport	ABP Port Talbot	ABP Swansea
Groupe Samat	Cardiff Harbour	Sims	Civil and Marine	Swansea
UK (transport	Authority (public	(electronic	(slag products)	Container
services)	sector)	goods		Terminal
		recycling)		(transport
				services)
JT Evans (road	Bob Martin	Jewson (timber	Ready Steels (steel	Swansea Bay Port
haulage)	Company	products)	reinforcements)	Health Authority
	(feeds)			
Harris Pye	Biffa (waste	Origin	Celtic (engineering	Inchcape (shipping
Marine (marine	services)	(fertilisers)	services)	services)
services)				
Scott Timber	Air products	Rexam	Corus Strip	Tarmac
(wood	(industrial	Corrugated	products (steel)	(construction and
importers and	gases)	(packaging)		aggregates)
products)				
Vopak	Texaco (fuel	Severn Sands	The Missions to	Morrissey cement
(transport and	distribution)	(aggregate	Seaman	(aggregates)
storage)		supply)		

3.1.3 This section provides an estimate of the employment and gross output linked to activity on (or dependent upon) ABP property. The first part of the section describes the method through which the estimates were gained. The second section provides a commentary on the estimates.

3.2 Estimates of Employment: Method

3.2.1 It is important here to make a distinction between activity undertaken by tenants of ABP within the port areas and activities outside of these areas. Several ABP tenants have facilities within the ports, but with the bulk of their activity located outside the port area. Examples here would be Dow Corning

at Barry and Corus Strip Products at Port Talbot. One purpose of the report is to identify industries that are strongly dependent on the ports. Consequently there are several cases of firms operating adjacent to ABP property, who pay fees to ABP for port facilities and storage etc, but whose main operations would be threatened by port failure.

- 3.2.2 The task here was first to estimate employment and output within the port boundaries and then to add an estimate for adjacent activities deemed as directly dependent.
- 3.2.3 In the first economic impact study undertaken by ABP in 2003-04 three main sources were used to identify employment levels within the ports themselves. These were a direct survey of tenants, company accounts databases, and the Office for National Statistics *Annual Business Inquiry* (ABI).¹ For the revised work we have made reference to the results from the earlier survey, but with concerns that the employment data here would be very out of date. Indeed, the period 2003-2007 has seen further upheavals in Welsh manufacturing in particular.
- 3.2.4 In consequence, for this revision we have been more reliant on information contained within the ABI. This has been used differently for this revision. The challenge here was to collect employment data at the two digit (Standard Industrial Classification) level for areas corresponding as far as possible with ABP boundaries. For the first analysis in the ABP (2004) impact report we were able to use the ABI for 2002. For this iteration, we have used the ABI for 2006 but have linked the ABP port boundaries to super output areas² (i.e. a lower level of spatial aggregation than wards), and then used this as a basis for a 2007 employment estimate.
- 3.2.5 Even these smaller areas did not exactly correspond with the ABP boundaries such that it was also necessary to use the employment estimates at super output area level with the tenants lists provided by ABP to come to an estimate of full time employees within each port boundary.
- 3.2.6 It is stressed that the employment numbers and associated output and gross value added figures are estimates for 2007.
- 3.2.7 Added to this full time employment estimate within the port curtilage, was employment in two large companies that had manufacturing operations directly adjacent to ABP property, but were also ABP tenants (i.e. leasing port facilities, or storage areas etc). These two companies are particularly dependent on the port infrastructure for their continued successful operations in Wales. Similar conclusions could undoubtedly be made for

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¹ See initial ABP economic impact report produced in December 2004, and estimating tenant activity for 2003.

² The five ABP port boundaries linked to the following super output areas Cardiff 047c, Neath Port Talbot 019a, Newport 018b, Vale of Glamorgan 015c & 015e, and Swansea 021a & 021b.

- other ABP tenants who also had manufacturing operations just outside the ABP boundaries, but the dependence of others was not so easily identifiable.
- 3.2.8 The full time employment (FTE) estimates were used in conjunction with ABI information of output and gross value added by Welsh industries to gain an estimate of the output and gross value added (GVA) supported on ABP property.

3.3 Employment and output estimates

3.3.1 Table 3.2 shows our estimate of FTE employment within ABP boundaries plus FTE employment in two large port dependent manufacturing operations adjacent to ABP facilities. This does not include the direct employment provided by ABP itself.

Table 3.2 Employment, output and gross value added estimate; ABP tenants, 2007

Industry	SIC codes	Employment (full time	Output	Gross VA
	(see note)	equivalents)	£m	(GVA) £m
Manufacture of chemicals, rubber and plastics, non-metallic minerals	23-26	713	130.7	44.0
Manufacture of metals and metal products	27-28	4150	881.1	154.3
Manufacture of electrical goods and other engineering	29-35	203	31.5	9.7
Other manufacturing and recycling	15, 20-22, 36-37	540	96.0	25.2
Construction and aggregate products	45, 14	1336	135.5	50.0
Wholesale etc	51	734	51.6	33.4
Transport and communication	60-64	1214	137.0	67.1
Renting equipment and other business services	70,71, 74	727	41.2	26.1
Public admin	75	94	7.2	2.4
Total		9711	1511.8	412.1

Note: for some SIC 2 digit codes there was no employment identified within ABP boundaries. Totals may not sum due to rounding

- 3.3.2 Table 3.2 reveals that ABP tenants provide an estimated 9,711 FTE jobs in industrial South Wales. Around 43% is in basic metals and metal products where the estimated 4,150 FTEs can be connected to £0.88bn of output and £154m of gross value added.
- 3.3.3 Other larger sectors in employment terms include construction and aggregates. Here it is estimated that the sector employs 1,336 FTEs within

ABP boundaries, which is associated with output of £136m and value added of £50m. There are also a large number of employees within the ABP curtilage connected to transport and communications. This includes a large number of firms providing road transport, and firms providing transport services. It is estimated that this sector accounted for 1,214 FTEs, and £137m of output and £67.1m of gross value added.

- 3.3.4 In total it is estimated that the firms either within the curtilage or directly dependent on the port infrastructure accounted for £1.51bn of output and £412m of gross value added. Placed in another way this means each employee in a tenant firm is associated with an average of around £156,000 of output and £42,400 of GVA.
- 3.3.5 In context, total Welsh output and GVA in 2007 were an estimated £91.1bn and £44.3bn respectively. Then the output and GVA highlighted as attributable to ABP tenants and dependent firms in Table 3.2 in 2007 represented 1.7% of Welsh output in 2007, and 0.9% of Welsh GVA in that year.
- 3.3.6 It is also important to note that much of the employment described in Table 3.2 is in manufacturing sectors that are strong exporters, and where earnings levels are relatively high i.e. relatively capital intensive sectors such as metal manufacturing and chemicals. These sectors are important contributors to the contemporary regional economy and play a key role in supporting regional incomes.
- 3.3.7 In summary this section gives testimony to the diverse operations supported by ABP facilities in South Wales. However, ABP and its tenants also support activity in the wider Welsh economy. This is analysed in the next section.

4 ABP, ABP Tenants and the Welsh Economy

4.1 ABP and Tenants: Direct and Indirect Effects

- 4.1.1 The opening sections have examined the direct activity supported by ABP and their tenants in terms of employment, output and gross value added. However, ABP and its tenants support economic activity across Wales. ABP and their tenants spend money in the regional economy. This spending will have indirect economic consequences according to how that money is spent.
- 4.1.2 ABP and its tenants purchase as inputs the goods and services provided by other Welsh industries. For example, in the ABP case this includes items such as sub-contract services, materials, construction industry outputs, fuel and other equipment. The producers of these goods and services then also spend money on the outputs of other Welsh industries. Importantly, this spending supports rounds of further spending in the local economy. These are categorised as 'supplier' effects, and an important determinant of the size of these effects is the level of local sourcing by firms, and then the levels of local sourcing along the supply chain. Again, in the case of ABP itself, a large proportion of its spending is on locally produced goods and services, however, this proportion will vary considerably between the different tenants. For example, some manufacturers will be heavily dependent on imported goods and services.
- 4.1.3 Economic impacts go well beyond these supplier effects. For example, ABP has a payroll bill of over £8m per annum. This represents in large measure incomes to local people. A proportion of these incomes is spent within Wales, and then this spending also adds to local demand. Similarly a proportion of the employment in local suppliers is supported by ABP and its tenants, and these employees earn incomes that when spent would also generate further local demands.
- 4.1.4 These are examples of 'induced-income' effects and must be added to the 'supplier' effects to arrive at a full understanding of the total indirect or multiplier consequences of ABP and tenant activity. Multiplier effects can be categorised in terms of spending, and employment.

4.2 Indirect Effects of ABP Activity

4.2.1 In order to estimate the indirect effects associated with the core activity of ABP and its tenants it was necessary to use an economic model of the Welsh economy. The approach adopted was to use Welsh Input-Output

- tables for 2003. More information on the methodology can be found in the Appendix.
- 4.2.2 Data provided by ABP South Wales showed that its estimated output (sales) in 2007 was £43.4m. Table 4.1 shows the indirect and induced effects associated with this direct output. As ABP spends money in the Welsh economy it supports output in its value chain. Moreover, it also supports incomes in the local economy, which when spent also create further demands for industry output.
- 4.2.3 Using data provided by ABP it estimated that local spending on goods and services, and wages/salaries in 2007 was an estimated £22.2m. Table 4.1 shows that the spending supported a total of £36.4m of output in the Welsh economy, with the majority of this activity supported in the construction and wholesale sectors. Adding this to the £43.4m of ABP output gives total output supported by ABP operations in South Wales of £79.8m, which can be connected with an estimated £34.2m of Welsh GVA.
- 4.2.4 This means that for very £1m of direct ABP output, an estimated £1.84m of output in total is supported elsewhere in the Welsh economy, and an estimated £0.79m of GVA. Importantly ABP purchases from Welsh industries that also themselves purchase high quantities of goods and services in the local economy.
- 4.2.5 As was shown earlier in the report, ABP supports employment in sectors that are relatively labour intensive. The firm uses a large amount of sub-contract labour services. However, the core employment of ABP in South Wales is quite small. Then when one compares the direct employment of 201 FTEs with what is supported as a result of ABP spending, then the ratio of one to the other is quite large. It is estimated that every FTE job in ABP supports around 3 others in the regional economy.
- 4.2.6 Put another way each £1m of ABP direct output in 2007, directly and indirectly supported around 19 FTEs in the Welsh economy

Table 4.1 Multiplier Effects of ABP Own Activity

	Spending/Output £m
ABP	£43.4m
Impacts on	
Primary and manufacturing	3.2
Electricity, gas and water	1.5
Construction	10.1
Retail and wholesale	8.6
Transport and communications	4.2
Business and professional services	5.9
Other services	3.0
Total indirect	36.4
Total spending impact	£79.8m
Total GVA impact	£34.2m
Total output supported in Wales per	
£m ABP output	£1.84m
Total GVA supported in Wales per	
£m ABP output	£0.79m
Total FTEs in Wales supported per	
£m of ABP direct output	19.4

Totals may not sum due to rounding

4.2.7 The overall output multipliers for ABP are quite low when compared to those of other industries in the Welsh Input-Output tables. This is a direct reflection of the fact that total purchases of goods and services are a relatively small proportion of ABP gross output.

4.3 The Activity in Wales supported by ABP tenants

- 4.3.1 As highlighted earlier the estimation of the activity supported by ABP tenants is a little more complex. Section 3 of this report estimated that the tenants of ABP together with those operations defined as directly dependent on the ports accounted for around £1.51bn of gross output and 9,711 FTE jobs.
- 4.3.2 If this activity was hypothetically removed from the Welsh economy it would impact upon other elements of the value chain, and upon incomes (this is one way of assessing the economic significance of these activities). Table 4.2 summarises the effects by broad industry. The £1.51bn of tenant gross output is associated with a further £1.27bn of output in other Welsh industries i.e. this is assumed to be lost if the tenants were removed. The corollary of this is that, on average, each £1m of tenant output supports a further £1.84m of output in the regional economy, and £0.60m of GVA.

Table 4.2 Estimated Economic Effects of ABP Tenant Activity

	Spending/Output £m
ABP Tenants (direct)	1511.8
Total indirect impacts	1268.8
Total impact (direct+indirect)	2780.6
Total GVA supported	902.5
Total output supported in Wales per £m ABP tenant output	£1.84m
Total GVA supported in Wales per £m ABP tenant output	£0.60m
Total FTEs in Wales supported per £m of ABP tenant direct output	16.7

Totals may not sum due to rounding

- 4.3.3 In large measure the effects here would be felt in the manufacturing, retail and wholesale, and financial and business services sectors. Unlike ABP itself, the tenant set purchases significant amounts from the regional manufacturing sector.
- 4.3.4 Table 4.2 also reveals that ABP tenant gross output of £1.51bn was directly connected to an estimated 9,711 FTEs. This means every £1m of tenant output is directly associated with around 6.4 FTE jobs. However, once the total economy effects of the tenant gross output are taken into account then each £1m of tenant output is associated with 16.7 FTE jobs. We also estimate that the activities of tenants directly supports around £412.1m of GVA directly. Once total economy effects are added to this the total GVA supported increases to an estimated £902.5m; put another way each £1m of ABP tenant output supported an average of an estimated £0.60m of GVA directly and indirectly.
- 4.3.5 If these results are placed in a wider Welsh context, then in 2007 it is estimated that the gross output of all Welsh industries was around £91.1bn, and that total GVA was £44.3bn. In this context the output and GVA directly and indirectly supported by ABP tenant activity is around 3.1% of total Welsh gross output, and an estimated 2.0% of total Welsh GVA.

5 Conclusions

- 5.1.1 The objective of this report was to explore the economic impact of both ABP, and of firms either within the curtilage of the five ABP ports, or firms dependent on port infrastructure. This report demonstrates that ABP infrastructure supports extensive economic activity in the Welsh economy.
- 5.1.2 This report has highlighted the role of ABP in supporting Welsh trade, handling 15.6m tonnes of different cargoes in 2007, including high volumes of iron ore, coal, metals and petro-chemical products.
- 5.1.3 The report has also shown how ABP infrastructure supports other business operations both within the curtilage of the ports themselves and outside of it. ABP has 348 tenants within the curtilage of its five South Wales ports. Some of Wales' largest and most important manufacturing industries rely on ABP infrastructure and support. ABP also does much to enhance the location offer of the contemporary Welsh economy.

Table 5.1: Comparison of 2007 with 2003 ABP Study

	2003	2007
ABP		
Gross output	£42.3m	£43.4m
Employment(FTEs)	212	201
Total Welsh output directly and indirectly supported by ABP own activity	£63.6m	£79.8m
Total Welsh GVA directly and indirectly supported by ABP	-	£34.2m
ABP tenants		
Estimated employment (FTEs)	7,550	9,711
Gross output of tenants	£1.11bn	£1.51bn
Total Welsh output directly and indirectly supported by ABP tenants	£1.67bn	£2.78bn
As % Welsh total	2.1%	3.1%
Total Welsh GVA directly and indirectly supported by ABP tenants £m	-	£902.5m
As % Welsh total	-	2.0%

5.1.4 ABP itself employs around 201 people in industrial South Wales. It is estimated that ABP tenants employed 9,711 FTEs and accounted for nearly £1.51bn of Welsh output, and £412m of gross value added. Once the total Welsh economy effects of ABP tenant activity are taken into account the

economic impact in terms of gross output supported increases to £2.78bn, which is around **3.1%** of total Welsh output, and the total contribution to Welsh GVA is £902.5m or an estimated **2.0%** of the Welsh total.

- 5.1.5 In Table 5.1 we compare the results gained from the 2003 study with that for the current study. In terms of ABP 'own' activity, there is some increase in the total Welsh output supported directly and indirectly by ABP's own spending. This may reflect a slightly different pattern of firm spending across the two reference years. There are greater differences in terms of the estimated employment on ABP property. This increases by around 30%, but with the amount of output directly and indirectly supported by ABP tenant output growing by over 25%.
- 5.1.6 It should be remembered that an exact reconciliation is not possible here with different versions of the Wales Input-Output tables used to estimate indirect effects. It is also noted that in this round we have used a different, and possibly, a more accurate way of estimating employment in the ABP curtilage. Then, in 2003 we estimated that output directly supported in the ABP tenants represented an estimated 2.1% of Welsh output. For the 2007 year we estimate this is closer to 3.0%. In both cases this shows the importance of firms in the curtilage of the ABP ports to the Welsh economy.
- 5.1.7 In summary, the findings here reveal the strong economic contribution of ABP port infrastructure to Wales. Direct port activities of ABP are connected to significant levels of direct and indirect output, income and employment generation. Similar conclusions apply for tenants on ABP property. These economic effects are coupled to less-measurable, but no less relevant impacts with, for example, the port infrastructure also improving access to tourists, and providing a path for the transfer of new technology and ideas.
- 5.1.8 A conclusion of the first report undertaken by Cardiff Business School for ABP was that ports have not featured as strongly in the regional infrastructure development debate as they perhaps should have done. We believe that this is still the case. One corollary of the analysis presented in this brief report is then that port development must continue to be viewed as an important component part of general transport policy development in Wales.

Appendix 1: Using Input-Output tables

To estimate the indirect (or multiplier) consequences of ABP and tenant activity it is necessary to have a picture of the local economy that specifies how the various industry sectors 'fit together' in terms of their trading relationships. This then allows the effects of activity in one sector to be traced through the entire local economy. The most comprehensive picture available of the Welsh economy is an Input-Output table.

The table presents a detailed financial map of the economy for a particular time period, typically one-year, and shows the flow of goods and services between industries, consumers and government. As well as being an important descriptive tool, the Input-Output tables can be used for economic modelling and for impact assessment. Input-Output Tables for Wales are the product of a continuing research project to develop a comprehensive picture of the Welsh economy and the way it is changing over time, undertaken by the Welsh Economy Research Unit at Cardiff Business School. Further description of the Welsh Input-Output project, its strengths and limitations, can be found in (Bryan et al., 2004).

The methodological approach adopted in this report involved two stages. The first task was to estimate the indirect (and induced) effects of ABP activity. In order to model the local impact of ABP it was necessary to have a detailed financial picture of the way in which ABP spends money. ABP staff completed a questionnaire which detailed their employment, wages and salary costs, total sales (and sources of sales revenue), and capital spending for 2007. In addition ABP provided details of their operational spending by category, and very importantly, the extent to which these expenditures involved purchases from Wales or elsewhere. This information was summarised in the main report in Section 2 (Table 2.3). The indirect and induced effects connected with this spending are gained by placing the direct purchases within the context of the Welsh Input-Output tables.

The second task was to estimate the indirect and induced effects connected with ABP tenant activity. This task was not so straightforward because details of the local spending patterns of the large number of tenants were not available. However, following the analysis in section 3, estimates were available on the employment and gross output of the tenant group by industry. From the Welsh Input-Output tables information was available on the total output and spending of these industries. Consequently, it was possible to estimate the proportions of the total Welsh industry output accounted for by the ABP tenant set. Furthermore, it was then possible to use the Input-Output framework to make a judgement on what would happen to the Welsh economy if the operations of these tenants were taken away i.e. a form of hypothetical extraction. The results of these processes are found in the main body of this report.

Appendix 2 ABP Tenant Impact Data for Newport Facility

The main report estimated that the tenants of ABP together with those operations defined as directly dependent on the ports accounted for an around £1.51bn of gross output and 9,711 FTE jobs. Below we provide an estimate of how much of this activity centres on ABP Newport.

Table A1 shows that we estimate there are 1,664 employees in the Newport curtilage, accounting for around £218m of gross output, and £79m of GVA.

Table A2 shows that we estimate that the £218m of Newport tenant gross output is associated with a further £169m of output in other Welsh industries i.e. this is assumed to be lost if the tenants were removed, giving a total impact of £387.2m. The corollary of this is that, on average, each £1m of Newport tenant output supports a further £1.78m of output in the regional economy i.e. an output multiplier of 1.78. This also means every £1m of Newport tenant output is directly associated with around 7.6 FTE jobs. However, once the indirect and induced effects of the tenant gross output are taken into account then each £1m of tenant output is associated with 16.0 FTE jobs.

ABP tenants at Newport are also estimated to support directly and indirectly around £150m of Welsh GVA.

Table A1 Estimated employment FTE in ABP tenants at Newport (2007) and associated output (£m)

Industry	SIC codes (see note)	Employment (full time equivalents)		Gross VA (GVA) £m
Manufacture of chemicals, rubber and plastics, non-metallic minerals	23-26	0	0.0	0.0
Manufacture of metals and metal products	27-28	491	68.5	23.7
Manufacture of electrical goods and other engineering	29-35	54	8.3	2.3
Other manufacturing and recycling	15, 20-22, 36-37	297	63.4	15.3
Construction and aggregate products	45, 14	224	22.5	8.3
Wholesale etc	51	276	19.4	12.5
Transport and communication	60-64	264	32.3	14.6
Renting equipment and other business services, and other	70,71, 74, 75	58	3.5	2.2
Total		1664	217.9	78.8

Table A2 Estimated Economic Effects of ABP Tenant Activity 2007 (Newport)

ABP Tenants (direct)	£217.9m
Total indirect impacts	£169.3m
Total output impact (direct+indirect)	£387.2m
Total GVA impact (direct + indirect)	£149.7m
Total output supported in Wales per £m	
ABP Newport tenant output	£1.78m
Total GVA supported in Wales per £m	
ABP Newport tenant output	£0.69m
Total FTEs in Wales supported per £m of	
ABP Newport tenant direct output	16.0

Totals may not sum due to rounding.