# PORT OF PLYMOUTH EVIDENCE BASE STUDY

## Produced by Atkins Ltd for Plymouth City Council June 2010

## **Executive Summary**

as prepared by Kaja Curry, Coastal Planning Coordinator, Planning Services

#### Introduction

Atkins Ltd was commissioned in November 2009 by Plymouth City Council (PCC) and its partners Devon County Council and Cattewater Harbour Commission, with support from the Tamar Estuaries Consultative Forum, to undertake a study of the Port of Plymouth. The study aims to provide a robust evidence base which can be used to inform a range of future policies and plans in Plymouth and the South West region. Furthermore, should the decision be taken to prepare a masterplan for the Port of Plymouth, the study will provide a sound foundation from which the masterplan can be developed.

This summary provides the key points from the findings. However, the documents themselves go into far greater detail with over 200 pages of data and statistics.

## **Purpose of Study**

Collectively, the four ports (Cattewater, Sutton Harbour, Millbay and Devonport) in Plymouth represent one of the South West's and UK's largest and most diverse ports. Whilst the ports all act independently they do have inter-related roles which have a significant combined impact on local, regional and national economic development and transport and, in the case of Devonport, also on our national defence capability.

The study aims to establish a robust evidence base of the four ports with a view to providing an important input into a number of key policies and initiatives including:

- Plymouth Local Development Framework (LDF) Core Strategy Review and relevant Area Action Plans (AAPs);
- Local Economic Strategy Review;
- South West Delivering a Sustainable Transport Strategy (DaSTS)
- Local Transport Plan 3 (LTP3).

## **Approach**

The key components of the work were as follows:

#### Final Report: Volume 1:

**Baseline Position** 

- Existing role and activities
- Port Infrastructure audit
- Key policy considerations
- Transport considerations
- Coastal Environment Considerations
- Economic Significance of Port Influencing Factors & SWOT
- Influencing factors & SWOT
- Future Scenarios
- Recommendations

#### Final Report: Volume 2 Appendices:

- Appendix A Stakeholder consultations
- Appendix B Plymouth's Commercial Port Facilities
- Appendix C Overview of South West Ports

- Appendix D Policy Context
- Appendix E Coastal Environment
- Appendix F Listed Buildings and Scheduled Ancient Monuments, Devonport South Yard.

#### Stakeholders Consulted

Engagement with the key stakeholders in this subject matter was done through face to face meetings as well as through the stakeholder workshop.

The following were consulted with:

Cattewater Harbour Commission

Cattedown Wharf

MoD

NHNB Devonport Plymouth City Council Plymouth Yacht Haven Pomphlett Wharf

QHM

Queen Anne's Battery Marina Sutton Harbour Company Sutton Harbour Marina

Tamar Estuaries Consultative Forum

Victoria Wharf

Associated British Ports

Chamber of Trade and Commerce Department of Communities

Devon County Council
Environment Agency

Marine and Fisheries Agency

Maritime Plymouth Natural England Network Rail

Plymouth City Development Company

Plymouth Chamber of Commerce and Industry Plymouth University Princess Yachts Regen SW

South West RDA

## **Key Findings**

## **General Description**

The 'Dockyard Port of Plymouth' includes the two main elements of:

- The Royal Navy and Ministry of Defence (MoD) facilities, including Devonport Dockyards and other facilities and
- Commercial port activities including primarily Millbay (operated by by ABP Ports), Sutton Harbour and Cattewater Harbour Authority. Cattewater sees the bulk of commercial movements with vessels going to and from Cattedown Wharves, Victoria Wharf and Pomphlett Wharf.

In 2009 nearly 60,000 vessel movements were recorded within the port limits of which 75% were defence related. Further breakdown in shown in Figure 1.

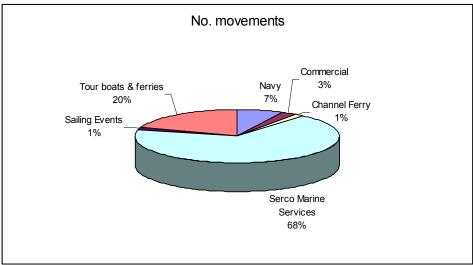


Figure 1: Vessel Movements in Plymouth 2009 (excluding Torpoint Ferry)

## **Naval Activity**

Devonport is the largest Naval Base in Western Europe covering over 650 acres with 15 dry docks, four miles of waterfront, 25 tidal berths and 5 basins and accommodating approximately 5,000 naval vessel movements per year.

The key services that the naval port provides today is summarised as follows:

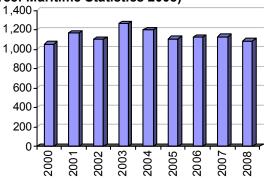
- Base port to many naval vessels including the largest, HMS Ocean at 21,000 tonnes, also fourteen frigates, seven Trafalgar class submarines, four of the five hydrograhic survey ships and two amphibious assault ships.
- Only site in UK equipped to conduct nuclear submarine refits, including those of the Vanguard class.
- · Surface ship refitting facilities.
- Home to Flag Officer Sea Training (FOST) which trains officers of all surface ships, submarines and Royal Fleet Auxilliaries as well as offering training packages to other NATO countries.
- Home to Royal Navy Clearance Diving team from the Southern Diving Group covering Swangage round to Birkenhead.

Many MoD related services are now provided through contractors such as Babock Marine and Serco.

## Port Activity - commercial

Figure 2 shows that commercial ship arrivals (excluding naval) have stayed relatively stable during the period 2000 – 2008 with a peak of 1,262 in 2003.

Figure 2: Ship arrivals in Plymouth 2000-2008 (source: Maritime Statistics 2008)



The majority of the vessels arriving at Plymouth are relatively small with 82% less that 5,000deadweight tonnes (dwt) reflecting the traditional short sea/coastal shipping orientation of the port. This is shown in Figure 3.

Figure 3: Ship arrivals at Plymouth by type and deadweight 2008. (Maritime Statistics 2008)

Deadweight Tonnes	1 - 4,999	5,000 - 19,999	20,000 - 99,999	All
Tankers	57	155	3	215
Ro-Ro vessels	487	-	-	487
Fully cellular container vessels	13	2	-	15
Other dry cargo vessels	333	35	-	368
Total all vessels	890	192	3	1,085

Figure 4 gives the main trades and markets for goods passing through Cattewater and Millbay, which underline the regional and local significance of the Port providing goods for a relatively local market.

Figure 4: Summary of Port of Plymouth main trades & markets

Cargo Type	Direction	Market	Outlook
Liquid Bulk			
- Oil Prod	ucts Inward (coastal shipping)	Far South West (Cornwall & Devon)	Stable
Dry Bulk			
- Animal F	eed Inward (from Rotterdam)	Local/Regional	Stable; seasonal
- Fertilise	r Inward (from Rotterdam)	Local/Regional	Stable; seasonal
- Ball Clay	y Outward	Europe (Spain)	Declining

- Stone	Outward	Channel Islands, SE England	Stable
- Stone	Inward (from Ireland)	Local/Regional	Stable
- Cement	Inward (from Germany)	Local/Regional	Stable
- Salt	Inward	Local/Regional	Growing
Fish	Inward	National	Declining
Ro-Ro HGV	Inward (mainly)	Regional/National	Stable

#### **Economic Impact**

**Direct Employment:** The marine and maritime sector in Plymouth accounts for approximately 13,500 jobs of which at least 8,500 are provided at Devonport (Babcock – 4,500; MoD – 800; Major on-site contractors – 2,500; others – 700). This is equivalent to approximately 12% of total employment in Plymouth city and 10% in the Plymouth Travel to Work Area (TTWA).

**Indirect Employment:** Indirectly the marine sector supports another 3,400-6,800 jobs in Plymouth's sub-region, thereby raising the sector's overall contribution to around 19% of Plymouth's employment and 14% in the Plymouth TTWA which is of equal significance as the education sector or the wholesale and retail sector. At least 50% of marine related employment is accounted for by Devonport.

**Value:** Atkins have estimated that the marine and related sector contributes £1.7 billion in terms of GDP and nearly £1 billion in terms of GVA representing around 25% of the city's total GVA.

## **SWOT Analysis**

Following a review of the various influencing factors, the following Strengths, Weaknesses, Opportunities and Threats were identified.

#### **Strengths**

- Well established and diverse port
- Relatively deep water & natural harbour
- Significant and strategic naval, commercial and ferry port.
- Major cluster of marine businesses naval, boat building, R&D, fish market, marine services
- Devonport and naval heritage helps to define Plymouth both domestically and internationally.
- 12% Plymouth employment dependent on marine sector.
- Major centre for higher education and research and development in the marine sector.
- Major marina / waterside leisure location and important fish market.
- Naval presence means that maintenance work does not fall to commercial operators.
- · Minimum and local coastal erosion / flood risk

#### Weaknesses

- Limited water depth at low tide & navigational constraints prevents larger vessels from using the port.
- Limited by its peripherality, it serves largely local and regional commercial markets.

- Limited mix of cargos no containers and heavily dependant on liquid bulk oil (58% of the port tonnage).
- · Low level of exports and outward traffic.
- Lack of single 'champion' for port interests this is required to promote the Port and facilitate communication between the industry and external organisations as well as the general public.
- Rail restricted loading gauge limited intermodal container traffic
- Limited local rail freight facilities at the Port
- Loss of waterside land for higher-value uses

#### **Opportunities**

- High level of planned population & employment growth
- Expansion of oil-related cargoes
- Growing demand for marina / leisure based activity
- Strong policy support for sustainable freight transport (including short-sea shipping) with some grants being available.
- Growth in Northern European cruise market
- Need to accommodate requirements to service marine renewables sector
- Potential release of vital port infrastructure at Devonport could provide opportunities for commercial port activities
- 4 of the 8 priorities in the South West Economic Strategy are directly relevant to the port (marine, defence-related engineering, tourism and environmental technologies)
- Plymouth well placed to capitalise on marine renewables, research and development and marine education.
- Strategic planning provides the opportunity to further capitalise on the port sector.
- Feeder container facility for servicing local / regional market
- Wharfs and port facilities could be enlarged.

#### **Threats**

- Small / self-contained market with competition from other ports for limited cargoes
- Competition for cruise (e.g. Falmouth)
- Economic & supply-chain implications of Strategic Defence Review Devonport
- Need for infrastructure investment at Devonport
- Devonport listed buildings could limit opportunities
- HSE Blast zone limits development
- Lack of public funding for ports development
- Loss of key waterside sites to non-port uses
- Modal transfer will require significant capital investment
- Limited expansion capacity at Cattewater & Sutton Harbour
- European Marine Site designation requires any development to ensure no significant environmental impact
- Rail access to Cattewater mothballed
- Port expansion constrained by local and regional transport networks
- Lack of single focal point for promoting the Port of Plymouth as a whole.

The SWOT analysis identifies some clear opportunities for the Port of Plymouth whilst also demonstrating the complexities of port operation and development.

#### **Scenarios**

Following analysis of the current operations, national and regional market trends, influencing factors and the SWOT analysis, five scenarios were identified in order to inform the development of a port master plan for Plymouth. These then formed the basis for discussion through the stakeholder workshop which was attended by 30 representatives from the sector.

#### Scenario 1: Safeguard existing position / business as usual

Safeguarding existing commercial port activities and facilities, retaining market share in bulk cargoes and petroleum products. No change in marina space (except Millbay). No significant change to Devonport. Relies on strong policy approach to safeguarding essential sites critical for port and marine operations.

#### Scenario 2 Targeted diversification

Scenario 1 plus targeted promotion of Plymouth towards the renewables sector and new cruise liner facility. Will require some release of land from Devonport and/or reuse of Turnchapel, investment in some port facilities and strong policy approach to safeguarding critical sites.

## Scenario 3 Managed contraction of commercial port facilities & enhancement of leisure role

Subject to a decline in market demand for commercial wharfs and waterside facilities, build on existing advantages of Plymouth as marina location Disused commercial wharfs would be developed into new marinas and key landside sites would be redeveloped for non-port uses. Existing port cargos would be handled through intensification of reduced number of commercial sites. Would require flexible policy approach to safeguarding sites in key waterside locations.

#### Scenario 4 Major step change / re-use of Devonport land and waterfront

Would be driven by substantial release of waterside infrastructure and land at Devonport and would involve Plymouth aggressively expanding it's role in commercial / leisure port activities. Could include container facility, increasing size of bulk cargo vessels accommodated, developing cruise liner facility and development of new marina and leisure facilities. Would require sufficient market demand, significant investment, and strong policy support for safeguarding essential sites.

#### Scenario 5 Radical restructure

Assuming that Yonderbury Jetty would no longer be required, then this would involve relocation of existing liquid bulk from Cattedown, bulk services relocated to South Yard and development of leisure and cruise facilities. Would require extremely high levels of investment.

#### **Scenario Evaluation**

At the stakeholder workshop, each scenario was evaluated against the following key criteria:

- Economic and social implications for Plymouth and wider sub-region
- Commercial viability
- Transport implications
- Environmental impact
- Implications for land-use planning and policy
- Key strengths and weaknesses

As a result no single preferred scenario was identified as being the outright optimal way forward for strategy development. However, Scenarios 1, 3 and 5 were largely discounted.

**Scenario 2** was considered the most realistic basis for strategy development over the next few years although stakeholders were keen to ensure that a diversification approach as seen in **Scenario 4** was also investigated.

### Progress to a full Masterplan / integrated plan - options

The purpose of this report was to provide a comprehensive evidence base for the Port of Plymouth with a view to providing inputs into future spatial, land-use, transport and economic development plans, policies and initiatives. The question of how best this information should be packaged together needs to be addressed and particularly whether this should be as a single Port Masterplan, whether it should be more aligned to the spatial planning process or some other option needs to be agreed.

The report does identify that a single document could fulfil the following:

- Provide a strong basis for promoting the Port and the wider city of Plymouth;
- Provide a solid framework for prioritising potential investment in the port and associated infrastructure;
- Enable a more strategic and coherent approach to the planning and development of the Port of Plymouth as a whole;
- Provide recommendations for optimising administrative arrangements to support the divese range of activities undertaken in Plymouth
- Provide links to the proposed marine plans which will be developed by the Marine Management Organisation as set out in the Marine and Coastal Access Act 2009,

In delivering this a number of options on how best to proceed were identified as:

- Take no further action an opportunity missed
- PCC driven and funded Masterplan discounted as recognised that this would need to be jointly owned by the harbour authorities.
- Private sector funded Masterplan discounted as recognised that this would also need to be
  jointly owned by the local authority.
- Develop a Coastal/Marine Supplementary Planning Document as a de facto plan for the port and the surrounding maritime environment.

The report recommends that the merits of each of these options be more fully evaluated relative to the benefits of a port master plan.

## **Recommendations and Next Steps**

- 1. Masterplan/Coastal Action Plan / Supplementary Planning Document Preparation: identify which is the best way forward.
- 2. **Safeguarding Marine Employment Sites**: Further refine the way in which the 'Marine Employment Site' policy is applied using the criteria identified in the report.
- 3. Coherently Raising the Profile of the Port a 'Champion': Raise the profile given to the marine and maritime sector in all spatial development and promotional plans for Plymouth and its sub-regions through the identification of a dedicated 'Champion'.
- 4. **Cruise Market Feasibility/Action Plan:** work to include the production of a market study and action plan which identifies the most appropriate location for a new cruise facility in Plymouth.

- 5. **Skills and Training Investment & Sector Support:** delivering integrated training programmes which are targeted on meeting existing and emerging market needs with more employer-led training initiatives.
- 6. **Planning for Climate Change:** evaluating the potential effects of sea level changes on the port and marine operations.
- 7. Safeguarding Cattewater Branch Line Track Bed & protecting transport links: safeguard the line from change of use and ensure effective transport links to the port.