



4. Existing Marine Activity

4. EXISTING MARINE ACTIVITY

- 4.1 This section describes the existing marine activity in order to: define a baseline position within the study area; establish the economic significance of the activities; and provide a basis for analysing likely future trends.

Commercial Port Activities

- 4.2 The study area contains various commercial port activities. The most significant (excluding local ferries) take place within the commercial Port of Southampton, at Fawley refinery and terminal, at the Hamble oil terminal, at various commercial wharves along the Rivers Itchen and Test, at Portsmouth Commercial Port in Portsmouth Harbour and at wharves in Langstone Harbour and on the River Medina.
- 4.3 The commercial docks of the Port of Southampton is built entirely on land reclaimed from the Test and Itchen. It grew in three stages: the Eastern Docks, the Western Docks and their extension, generally referred to as the Container Terminal. However, the modern Docks are operated as a single entity. The Eastern Docks were constructed between 1838 and 1911, each phase a commercial response to growth in trade through the port. They currently have facilities for cruise, ro-ro cargo, grain and other bulk cargoes. It is also the location for port maintenance, support and administration services. The Southampton Oceanography Centre and associated berths for research vessels, along with the Port's vessel traffic services ("VTS") centre are also here.
- 4.4 The construction of the Western Docks, which began in 1926, and continued through a time of world economic uncertainty, was the result of a clear strategic vision for the Port. Crucial to the war effort, the Western Docks became fully commercially operational after 1945. They currently handle both dry and liquid bulk goods (including fertilizer, grain, scrap and aggregate), cruise passengers, ro-ro and fresh produce. The extensive areas between the quays and the main railway line that were originally intended to be for port-related industry but have largely been cleared of such uses, are now are in direct port use including container and ro-ro cargo storage. Both the Eastern and Western Docks are examples of the longevity of port infrastructure, with successive generations building not just for themselves, but also its flexibility and adaptability which is essential if ports are to survive over long periods of unpredictability and change.
- 4.5 The Western Docks were extended to form the container terminal, which was mainly built between 1967 to 1978, with Royal Consent being granted in 1979 for it to be named the Prince Charles Container Port. The last berth was added in 1996. The terminal is operated by Southampton Container Terminals Ltd., a joint business 51% owned by DP World and 49% by Associated British Ports, who are the owners and operators of the port. The terminal has 11 gantry cranes (with two more to be delivered in 2008) enabling four modern container vessels to be worked simultaneously. The majority of the site is used for container storage. To the rear of the storage area is one of the docks four dedicated marine rail freight terminals which together handle over 20 freight

trains each day, whilst at the northern end of the area lies a large vehicle terminal used for the storage of imported cars.

- 4.6 The eastern and western banks of the River Itchen contain a number of smaller commercial wharves and quays. These are generally used for the import and processing of sea-dredged aggregate.
- 4.7 Further to the south is the Fawley refinery and petrochemical complex. The operation of a modern refinery began in 1951 but its origins go back to the 1920s. It is the largest refinery in the UK and one of the largest in Europe. The eastern shore contains the BP oil storage depot located close to the mouth of the River Hamble.
- 4.8 Portsmouth Commercial Port is located on the eastern bank of Portsmouth Harbour and is predominantly a freight and passenger ferry port providing connections with the Continent and Channel Islands. It also provides specialist facilities for the import of fruit (almost 530,000 tonnes), including 70% of all bananas consumed in the UK. The port is owned by Portsmouth City Council and its day to day running is carried out by a small port authority of just under 100 direct employees.
- 4.9 Both Portsmouth and Langstone Harbour contain small commercial wharves that are used for import of marine dredged aggregate.

Defence Activities

- 4.10 The UK's only army run military port, the Marchwood Seamounting Centre is located on the western shore of the River Test, opposite the ABP commercial docks and within the Port of Southampton. It has been in operation since 1942 and is owned by the Crown. Its main function is to load and discharge service or civilian shipping in support of military administration exercises and operations worldwide.
- 4.11 Portsmouth Harbour contains several defence establishments. The Naval Base lies at the heart of the city and has been an integral part of the city since 1194. It is home to almost two thirds of the Royal Navy's surface ships, including three aircraft carriers, destroyers and frigates. It provides lodging facilities for Royal Navy personnel serving at the base and onboard Portsmouth based ships.
- 4.12 On the opposite shore to the naval base lie the armament storage sites at Frater and Bedenham. Run by the Defence Storage and Distribution Agency these sites store the ammunition for the Naval Base. To the north lies Fleetlands a site used for the repair and maintenance of helicopters.
- 4.13 To the north of the commercial port, Horsea provides military diving training for both Royal Navy and Army personnel. It is the location of the Defence Diving School, the UK's centre of excellence for providing military diving training. All basic training is conducted at Horsea Island. The facilities available including a 1km long salt water lake.

- 4.14 Whale Island is home to HMS Excellence, the Royal Navy's training establishment. It delivers a wide range of different training functions including the Phoenix School of Nuclear, Biological and Chemical Defence, damage control and fire fighting and the South East Naval Military Training Centre. HMS Bristol is permanently berthed at Whale Island providing training and accommodation for a variety of personnel.

Marine Leisure and Recreation Activities

- 4.15 There are three main concentrations of marine leisure uses and activities within the study area. These are on the Lymington Harbour, the Hamble River and the River Medina at Cowes. Similar activities and facilities are also located on the rivers Test and Itchen, and in Chichester and Langstone Harbour.
- 4.16 Lymington Harbour, at the entrance of Lymington River, contains two marinas (Berthon Marina and Lymington Yacht Haven) and room for 100 visiting boats at Town Quay. The Harbour is administered by Lymington Harbour Commissioners lead by the Harbour Master. The two marinas are privately owned and operated.
- 4.17 The Hamble River contains five large marinas and yacht clubs located along both banks of the River. Overall the river provides over 3000 moorings. The River is administered by Hampshire County Council as Harbour Authority, although the marinas and a large number of the moorings are privately owned and operated.
- 4.18 Cowes on the Isle of Wight is world famous as a venue for sailing and water sports, most notably Cowes Week held every August, which attracts upwards of 10,000 visitors. The Harbour and the River Medina are home to four marinas. Swinging and pontoon moorings are also provided by the Cowes Harbour Commission. Anchoring is also possible in certain parts of the Harbour.
- 4.19 In addition to these main clusters other marina facilities are located throughout the study area, for example at Chichester Harbour, Langstone Harbour, Portsmouth Harbour and the River Itchen. Numerous moorings and sailing clubs are also dotted throughout the study area.

Ship and Boat Building

- 4.20 The study area contains numerous firms involved in boat / ship building and repair. Activities undertaken range from building large commercial and defence vessels through luxury yachts, motorboats and cruisers to the manufacture of parts for ships and yachts such as carbon spars, spinnaker poles and ultra light hulls.
- 4.21 This marine activity is spread throughout the study area with the major concentrations being in Cowes and the River Medina, at Lymington, along the Rivers Hamble and Itchen and in Portsmouth Harbour.
- 4.22 The main commercial operation is that run by Vosper Thornycroft (VT) within Portsmouth Naval base, where both naval and specialised commercial shipbuilding takes place. Examples of recreational operations include

Southampton Yacht Services located at Saxon Wharf on the River Itchen who manufacture luxury yachts, Formula Yacht Spars at Lymington who manufacture high quality yacht masts and spars, and Seaward Marine at East Cowes on the Isle of Wight who specialise in the manufacture of motorboats and cruisers.

- 4.23 The marine manufacturing industry within the study area, both commercial and recreation, serve an international market with clients from all around the world.

Safety

- 4.24 Under the International Convention for the Safety of Life at Sea 1974 (as amended) a contracting state is required to arrange for the establishment of Vessel Traffic Services (VTS) where, in its opinion, the volume of traffic or the degree of risk justifies such services. The UK Government considers that the volume of marine traffic and the degree of risk within the Solent out beyond the Nab Tower (to the east of the Isle of Wight) justifies the provision of VTS services.

- 4.25 Associated British Ports are the VTS authority responsible for this area and its VTS facilities are based at dock head within the eastern docks at the Port of Southampton. Southampton VTS monitors the passage of 150,000 vessels (greater than 20 metres in length) through the area per annum and provides a service 24 hours a day, 365 days a year. Four radar stations provide coverage for VTS. These are located at: the VTS building at Dock Head; RAF Hythe; Calshot Tower; and Fort Cumberland, Eastney Point. ABP have operated a Solent wide radar based VTS service since 1958, one of the first to be established in the UK.

- 4.26 Under the terms of a formal agreement, ABP provides VTS coverage in much of the eastern Solent on behalf of the Queens Harbour Master (QHM) Portsmouth (who is statutorily responsible for pilotage within Portsmouth Harbour) and Maritime Coastguard Agency. QHM is the regulatory authority for the Dockyard Port of Portsmouth and the Eastern Solent.

- 4.27 Between them ABP and QHM are the regulatory authority for the majority of the water area within the study area. Statutory powers and obligations go beyond just pilotage and marine safety. Both authorities are responsible for environmental issues within their jurisdictions (such as oil pollution) and the management of the water space generally for all users.

- 4.28 The study area contains other Harbour Authorities responsible for various of the rivers, including the Hamble Harbour Authority, Lymington Harbour Commissioners and the Cowes Harbour Authority.

Research and Education

- 4.29 This is an established marine industry whose activities are closely related to the local marine economy and environment. The University of Southampton and Southampton Solent University and Portsmouth University provide undergraduate and postgraduate courses in subjects relating to the marine environment or marine activities. The University of Southampton has a campus

(the National Oceanography Centre) within the operational dock estate of the Port of Southampton.

- 4.30 In addition there are several other facilities offering practical and technical instruction in various marine and maritime subjects located throughout the study area.

Skills Development

MEMSP

- 4.31 A range of skills providers and initiatives impact directly on the supply of a suitably qualified workforce for marine-related activities in the Solent. For example, originating in the Solent sub-region, the Manufacturing, Engineering and Marine Skills Partnership (MEMSP) is a stakeholder alliance that brings together industry, training providers, business support services and individuals to resolve the critical skills issues facing manufacturing, engineering, and marine employers in the South East of England. MEMSP offers a range of skills initiatives and programmes aimed at the workforce, young people, training providers and employers. For the workforce, this includes a redundancy training programme, Adult Apprenticeship scheme and Business Improvement Techniques qualification. MEMSP also works with providers to help them develop and add to their mainstream training offer to employers. For young people and others, MEMSP offers a range of skills festivals, work trials, work place visits and other events to encourage them to consider a career in the manufacturing, engineering and marine sectors. These initiatives are particularly important in overcoming poor past perceptions of the sectors.

Marine Industries Centre of Vocational Excellence

- 4.32 The Hampshire & Isle of Wight Marine CoVE specialises in the training of personnel for the marine industry. This can be a course provided by the employer (usually with some government subsidies) for an engineering apprenticeship, or a student wishing to participate in a course in order to further their education with a National Vocational Qualification (NVQ) and an increase or change in their skill capability.
- 4.33 The CoVE exists to increase employer-college engagement through the ongoing development of relevant learning opportunities to meet current and future skill requirements in marine industries. This includes the development of vocational provision in further education, and liaison with schools to encourage participation from young people at all levels and abilities. The CoVE also encourages collaboration between providers and promotes excellence in learning to all students on specialist vocational programmes.

Regional Resource Centre (RRC)

- 4.34 The RRC is a working partnership consisting of Southampton City College, the Centre of Vocational Excellence (CoVE) for Engineering Practice & Productivity and Solent University. The three partners bring together a wealth of expertise, providing pioneering industry-driven training for companies, current students and tutors across the whole of the southeast region. This pool of expertise is

available for all marine based engineering, design & manufacturing companies throughout the southeast region.

Marine infrastructure

- 4.35 Marine infrastructure includes the facilities and services necessary for marine industries to operate safely in accordance with legislation and regulation. The responsibility for providing and maintaining marine infrastructure rests with a range of organisations. Individual operators of ports, jetties and terminals provide the basic infrastructure along with Harbour or Pilotage Authorities or bodies such as Trinity House. With few exceptions (e.g., Freight Facilities Grants or the maintenance of public hard) marine infrastructure does not attract public funds. If infrastructure is in general use, costs are usually recovered from users.
- 4.36 Even if an individual enterprise's needs are modest and irregular, for example extending only to the ability to launch and recover craft, these may nonetheless be crucial to the viability of the enterprise. For example, it is possible to build recreational craft at a distance from the shore, but only if a launch site is practically accessible and dependably available when required. Marine infrastructure requirements are often precisely quantifiable. If the requirements are not met, and it is impossible (for economic or environmental reasons) to meet them by extending existing infrastructure or providing new facilities, then new businesses cannot start and existing ones will fail.
- 4.37 Marine infrastructure constantly needs renewing and updating. The scale and pace of major change is mostly determined by external factors. In recent years the most significant trend has been the increase (across the spectrum) in maximum vessel size. The imposition of new or more demanding health and safety requirements and environmental standards has also been significant.
- 4.38 We have already touched on the demands placed on the Port of Southampton's infrastructure by the increased length, breadth and depth of containerships now coming into service in greater numbers, but similar trends are evident in all areas. For example, the Navy's new carriers will have three times the displacement of the ships they will replace and the approach channel to Portsmouth Harbour will also need to be dredged to accommodate them. The average size of recreational craft has also increased, which has meant that fewer can be accommodated afloat in a given mooring area.
- 4.39 The depth of water that is or can be made available is an absolute constraint on marine activities using coastal and riparian waters. It follows that the most important pieces of marine infrastructure in the Solent are the dredged channels leading to the principal ports. Depths alongside at individual berths are greater. The approach channel to the Port of Southampton is maintained to a minimum depth of 12.6 metres and extends along the River Test and Southampton Water, from berth 207 at the Container Terminal to the Bramble Bank turn, located off the shore south of Calshot Spit. From the Bramble Bank turn there is deep water of at least 12.6 metres in depth out into the Eastern Solent and the Nab Channel (which is maintained at a depth of 13.3 metres). The deep-water channel into Portsmouth Harbour is maintained to a depth of

9.5 metres. Dredged access channels of various depths are maintained to other facilities, such as Marchwood Seamounting Centre

- 4.40 Beyond the Nab Tower in the Eastern Solent are defined pilot boarding areas. Very Large Crude Carriers (VLCC – vessels over 60,000 tonnes dwt) have to be boarded by a pilot 4 miles south of the Nab Tower. Vessels below 60,000 dwt but above 150 metres in length have to be boarded by a pilot at either the Nab East or Nab West pilot boarding points close to the Nab. Other pilot boarding points for different types and lengths of vessels are defined further into the Eastern Solent. These various features are shown on the plan produced at Figure 4.1.

Land infrastructure

- 4.41 Good accessibility by rail and road (and latterly by air) especially from London and the other main UK conurbations, and the world, has been and remains a significant factor in maintaining the attraction of the Solent for marine industries. The benefits are across the board, with rail and road connectivity for freight being particularly important for the Port of Southampton, which is one of the best rail-connected ports in the UK. It is equally significant for much of the marine leisure sector's customer base and for the naval and defence industries.

Rail

- 4.42 Ports provide some 50% of all rail freight nationally and unitised freight is the greater part of this total. The Port of Southampton is by a wide margin the dominant contributor of rail freight in South East England with four rail freight terminals and three separate connections with the main line. Between 25-30% of all containers are rail-borne to and from the port. However gauge restrictions currently limit the ability to carry the larger size containers, which are becoming the norm. Hence, unless investment is put into enhancing gauge clearance, the proportion of containers travelling by rail will fall (funding of £43 million under the new Transport Innovation Fund has now been confirmed by the DfT for rail gauge enhancement between Southampton and the west coast mainline). There are currently 20 regular container train services daily with other bulk and ro-ro trains, and the occasional train for cruise passengers.
- 4.43 The scale of the Port of Southampton's use of the rail network is such that it is a major element of national rail freight, the economic value of which many consider to be given inadequate weight in comparison with passenger flows. The national rail network is under strain and it is carrying record numbers of passengers. Improvements for passengers at the expense of opportunities to grow port freight would however be a retrograde step, increasing pressure on already densely trafficked roads.
- 4.44 Marchwood Seamounting Centre and Fawley oil refinery are also rail-connected and make some use of the Fawley Branch line movements. Their demands on the rail network are light, in comparison with those of the Port of Southampton. Portsmouth Commercial Port is not directly connected to the rail network, but intends to make use of a Freight Facilities Grant to establish a transfer facility to a new depot at Fratton.

4.45 Figure 4.2 shows an overview of the existing rail network that serves the study area. There are four routes and rail facilities of strategic importance for marine industries:

- i. London Waterloo to Weymouth mainline particularly between Southampton Docks and Basingstoke, and via Reading and the Great Western Mainline to Oxford, Birmingham and the West Coast mainline. This is the route used by most of the rail traffic generated by the Port of Southampton (the rail equivalent of the A34 north-south road link). The principal issues for marine industries are gauge enhancements and the availability of train paths on the network.
- ii. Rail Freight Terminals – Four rail freight terminals are located next to or within the Port of Southampton with direct connections onto the main line. The main issues for marine industries are as above, plus the possible provision of a freight link into the Eastern Docks at Southampton.
- iii. Fawley Branch Line – Totton to Fawley - Provides rail access to Marchwood Seamounting Centre and Fawley refinery complex. Single-track freight only railway runs from a junction with the main line in Totton. The main issue for marine industries is keeping this lightly used line in use.
- iv. Southampton - Salisbury and Exeter - Basingstoke lines – This route between Millbrook and Basingstoke (via the Laverstoke curve) provides an alternative route for rail traffic from the Port of Southampton. The main issue for marine industries is again gauge enhancement.

Road

4.46 Accurate though such a statement would be, it would be simplistic merely to say that marine industries depend on adequate road access. There are several types of dependency. The first requirement is for adequate access to premises. This can be problematic in the case of marine industries generating heavy traffic or abnormal loads. Apocryphal evidence suggests that problems are growing because of the increases in physical scale, of recreational craft for example; increases in the volume of freight traffic generated by ports; and also as a result of the redevelopment of areas surrounding traditional routes to marine industries by higher density uses often with associated roadside parking, making it difficult for those industries to function. Inadequate access can be an absolute constraint on viability of marine industries.

4.47 A second need is for the transport of raw materials and finished products. These rely on a number of strategic roads, which we have identified below. A third need is for general accessibility for customers and clients. We have identified eight roads (see Figure 4.3) as of particular strategic importance for marine industries:

- i. M3 – The whole length is a key route for all Solent marine industries. It is the main link to the M25 and Greater London. Between the M27 and Junction 9 (with A34) it is part of the Port of Southampton's all-important freight link with the Midlands and the North. The principal issue for marine industries is the southbound congestion at Junction 9.

- ii. A34 – Another key route and also the main component of the dominant north-south route for traffic generated by the Port of Southampton. Links to M40/M1/M6. The main issue for marine industries is the capacity of the road at various locations, including north of Oxford.
- iii. M27/A27 – Strategic spine for most Solent marine industries. Between Junction 3 and Junction 4 this road is a component of the Port of Southampton's north-south link. East of Junction 4 the road provides strategic access for marine industries in Hamble, Gosport, the Portsea peninsulas and Langstone and Chichester Harbours. West of Junction 2 the road provides strategic access to the marine industries in the waterside (the western shore of Southampton Water). The main issue for maritime industries is congestion; the capacity of Junction 3; and widening schemes approved for two stretches.
- iv. M271/A35 – This is the final/initial part of the Port of Southampton's north-south link, and the principal access route for the Container Terminal / Western Docks. The main issue for marine industries is congestion around Dock Gate 20 and the need to consider extending M271 directly into the Docks.
- v. A3(M) – An important link to M25 and Greater London for marine industries in the eastern part of the Solent.
- vi. M275 – This route provides access to the Commercial Port and Naval Base. The main issue for marine industries is congestion around Naval Base Gates and the need to provide a direct access link to the M275.
- vii. A32 – The sole strategic access to the Gosport peninsula. Its well-documented inadequacies are a large part of the reason why it is difficult to foresee any substantial growth in marine industries in this area. The main issue for marine industries is significant congestion and delay, and the constraints on possible road improvements.
- viii. A326 – The sole access from junction 2 of the M27 to the strategic marine industries of the waterside including Marchwood Seamounting Centre, Former RAF Hythe and Fawley refinery complex. The main issue for marine industries is the capacity on some stretches and environmental constraints on improvements.

Definition of marine industry

- 4.48 The brief provided at the outset of the study requires the consultant team to define the marine industry within the study area and analyse its structure. As the study progressed it became clear that a more fundamental question first needed to be addressed, namely, whether the various marine activities within the study area can, or indeed, for the purposes of strategic planning, should be classified collectively as a single industry?
- 4.49 The principal characteristic of Solent marine industries is their diversity, in terms not just of the range of activities but also of the skills involved, the economic and political drivers, and the specificity of their physical requirements. For example, the skills needed to construct the next generation of aircraft carriers have little or no direct connection with those required to build recreational craft. Fifty years ago they just might have done, but this is no longer the case. Similarly, the global trends behind the growth of trade through the Port of Southampton are entirely unconnected with those that have given a fresh lease of life to the Naval Base and warship construction in Portsmouth.

The needs of the Port of Southampton and the Naval Base to deepen their approach channels are thus unconnected, and neither would be of value to the marine leisure industry. The land use needs not just of the individual marine sectors but also of the components of each of those sectors can also vary widely.

- 4.50 Linkages between the principal marine activities, are primarily concerned with the shared (and therefore potentially competitive) use of scarce coastal resources and of professional and regulatory services. These apart the various marine activities do share many needs.
- 4.51 The allocation of coastal resources is in the hands of the planning authorities on land and the harbour and navigation authorities on the water. We deal later with the way the planning authorities allocate coastal land, which is a key issue for the future. The role of the Harbour and Pilotage Authorities in safely managing a myriad of potentially conflicting demands in what is one of the most complex commercial and leisure estuaries in the UK is largely unsung. It is important to note here that they do it very successfully and we have come across nothing to suggest that the capacity of the water is likely to constrain the growth of marine industries although increased water activity would clearly bring additional challenges.
- 4.52 Although they may not bind together marine industries in a traditional economic cluster, linkages through the common use of services appear to be extremely important in the Solent. The process of attracting, consolidating and growing marine-related skills in areas such as insurance, law, regulation, safety, training and research, is a critical dynamic of city-building and therefore of considerable interest to the future planning of South Hampshire. Evidence for this process is largely circumstantial, for example the decision of Lloyds Register to relocate to Southampton without seriously considering other locations “because it was the only place to be”. However, it points to the importance of retaining the ‘draw’ – in this case the existence of an International Port and other key players in marine regulation.
- 4.53 An informal Solent ‘maritime community’ appears to exist, even if a formal economic cluster does not. It seems to operate on the basis of a tacit understanding that the waters of the Solent and the prosperity of the area are of interest to all, rather than on strictly economic self-interest. Key figures in each of the main industries are well known and the value of informal contacts should not be underestimated. Rather in the same way that instead of one large maritime economic cluster there are several smaller ones, there are several distinct communities of interest.
- 4.54 The identification of the links between ‘core’ marine industries and related activities sets challenges for researchers, exacerbated by the fact that the producing and service sector elements of the economy are becoming increasingly complex in terms of intra-industry dependencies and more diverse customer markets.

Standard Industrial Codes

- 4.55 Typically, when providing a baseline analysis of employment and other economic indicators standard industrial codes (SICs) represent the primary means by which sector specific data can be measured relative to the economy as a whole within a defined area. Whilst this has been attempted in a number of studies of the marine sector in South Hampshire (see Section 2 for examples of analyses carried out using SIC codes for defining the marine sector), SIC codes cannot sufficiently define the sector in its entirety. In particular, the SIC definitions do not enable traditionally defined employment sectors to differentiate between industries which are fully or partly reliant on core marine markets. Consequently, a potentially significant proportion of activities which are in practice marine industries, cannot be separately measured using standard statistical definitions. For example, Marine South East recently carried out a survey of registered members which found that, from a sample of approximately 400 organisations, around 80 different SIC codes (4 digit codes) were generated to describe their activities according to traditional industrial definitions. Indeed, the majority of identified SIC codes were not obviously recognisable as marine activities. This demonstrates the potential of traditional methodologies to under-estimate core marine employment activity.
- 4.56 Despite the difficulties of defining marine activities using SIC codes, it is important to demonstrate the 'best-fit' accounting approach using this method. This is helpful in providing a comparison benchmark against which to assess other, more empirically based definitions which are essential to conducting a comprehensive economic impact assessment of the sector. Table 4.1 sets out a broad-based, 'best-fit' marine and related sector definition used by the consultant team for benchmark analysis. The next section of this report provides employment and business unit data for the Solent and wider areas using this definition.

Table 4.1 – Broad-Based SIC (4-Digit) Definition of Marine Activities

4 Digit Standard Industrial Code – ONS 1993

0501 : Fishing
0502 : Operation of fish hatcheries and fish farms
1110 : Extraction of crude petroleum and natural gas
1120 : Service activities incidental to oil and gas extraction excluding surveying
1440 : Production of salt
1520 : Processing and preserving of fish and fish products
1541 : Manufacture of crude oils and fats
1752 : Manufacture of cordage, rope, twine and netting
2320 : Manufacture of refined petroleum products
2911 : Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
3511 : Building and repairing of ships
3512 : Building and repairing of pleasure and sporting boats
4524 : Construction of water projects
5138 : Wholesale of other food including fish, crustaceans and molluscs
5151 : Wholesale of solid, liquid and gaseous fuels and related products
5223 : Retail sale of fish, crustaceans and molluscs
6110 : Sea and coastal water transport
6120 : Inland water transport

6311 : Cargo handling
 6312 : Storage and warehousing
 6322 : Other supporting water transport activities
 6330 : Activities of travel agencies and tour operators; tourist assistance activities not elsewhere classified
 6340 : Activities of other transport agencies
 7122 : Renting of water transport equipment
 7420 : Architectural and engineering activities and related technical consultancy
 7522 : Defence activities

Source: ONS

Empirically Based Definition of Marine Activity

4.57 Bearing in mind the generic nature of the SIC definitions, the sub-sectors identified in Table 4.1 can only be used as a broad guideline for estimating the direct economic impact of the marine sector in the Solent study area. Given this limitation, it is an imperative requirement of this strategy to provide an empirically based definition.

4.58 As a starting point to the identification of key marine and directly related activities on an empirical basis, the consultant team reviewed the Marine South East definition that was set out in section 3 of the study brief that was provided. The objective of this review was to consider whether or not this anecdotal definition required any further refinement with a view to establishing a bespoke definition of the marine sector taking into account practical monitoring and measurement requirements essential to the development of the economic impact model.

4.59 It was concluded that the Marine South East definition does generally provide for the comprehensive range of activities to adequately represent the sector in the South East (and therefore also the Solent sub-region). A number of minor amendments were necessary to sharpen the focus of the categories of marine activities before providing a clear foundation on which to proceed with the development of a sample framework within which the economic impact assessment could be conducted. The following list of 18 core marine activities sets out the definition agreed with the Steering Group:

- 1) Oil & petrochemicals;
- 2) Marinas, berthing facilities or supporting services;
- 3) Leisure activities located close to marinas & other berthing facilities;
- 4) Cruise industry and supporting services;
- 5) Defence activities (particularly naval);
- 6) Commercial port activities (containers);
- 7) Commercial port activities (Roll on-Roll Off);
- 8) Commercial port activities (Bulk cargo other than oil & petrochemicals);
- 9) Commercial port activities (Ferry services other than cruise);
- 10) Commercial port activities (Cargo administration);
- 11) Transport logistics relating to ports;
- 12) Manufacturing – Ships, boatbuilding & repair;
- 13) Manufacturing – Marine and related equipment;
- 14) Marine services (including insurance, brokerage & other business services);
- 15) Fisheries;

- 16) Safety & Salvage;
- 17) Minerals;
- 18) Marine related education & research.

4.60 This definition formed the foundation for carrying out the strategic site assessments as well as the empirical business survey, the latter forming the primary source of data for the economic impact assessment of marine activity in the study area. This marine focussed definition provided the basis by which the constraints posed by SIC-led definitions could be overcome and reasonably identify more specialised activities for inclusion in the business survey and construction of the economic impact model (discussed in Section 5).