



Solent Waterfront Strategy

Volume One : Report

Adams Hendry Consulting Ltd, WS Atkins & Marina
Projects Ltd

December 2007



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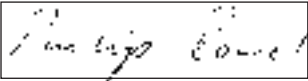
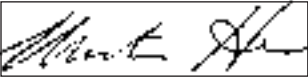
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Executive Summary

EXECUTIVE SUMMARY

1. Marine industries have long been central to popular imagery of the Solent. It appears that Portsmouth has forever been the 'Home of the Royal Navy', Southampton the 'Gateway to the World' and Cowes the 'Mecca of World Yachting'.
2. However, it would be delusional to believe that the Solent has retained the dominance in marine industries it once enjoyed. Over the past two or three decades, significant parts of the Solent's earlier maritime industrial base have disappeared. This upheaval is not over. Change is endemic and the Solent faces significant challenges if the traditional descriptive slogans are to remain relevant for much longer.
3. At the most strategic level, the importance of the study area for marine industries is founded on three activities: the commercial port of Southampton, the defence port of Portsmouth and the marine leisure and recreational business based on three strategic centres of Lymington, the River Hamble and Cowes and other important centres are at Chichester and Portsmouth Harbour. These three activities in Solent are all **nationally important** and **world leaders** in their fields. Stripped to its essentials, this is the essence of the marine asset in the Solent. If any of these activities fail or falter, then we think the consequences would be significant. The corollary is that it is necessary to plan for each of these three sectors to prosper.
4. The consequences of inaction would inevitably be decline from the current position and a change in the structure of the remaining maritime industry. This would unlikely be a gentle process if it were allowed to happen. It is possible to envisage a scenario in which the manufacturing component of marine industries largely disappears if it simply becomes too costly to manufacture in the Solent and the skill base declines. High value manufacturing should certainly be retained. It is also possible to see that without the ability to expand, the Port of Southampton will lose its status as a major direct call port of international standing.
5. There is a real choice to be made for marine industries in the Solent. We can continue to bask in nostalgia, long after the labels ceased to have meaning, but this would be unwise. **Significant action** is required now. SEEDA, PUSH and other relevant authorities have a central role in developing future spatial economic and land use planning policies to secure the future prosperity of the marine sector in the Solent sub-region. Marine industry and related organisations need to champion programmes on skills and competitiveness.

Marine Industry in the Solent

6. The principal characteristic of Solent marine industries is their diversity, in terms not just of the range of activities but also the substantial pool of skilled labour involved, the economic and political drivers, and the specificity of their physical requirements. The land use needs not just of the individual marine sectors but also of the components of each of those sectors can vary widely. Direct waterfront access is critical for some elements whilst others have less specific requirements and can operate from non-waterfront locations.

7. We conclude that marine industries can not be represented as a single economic cluster in the conventional sense or have a 'one size' policy that will support them all. 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. An informal Solent 'maritime community' appears to exist, operating 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.
8. Each of three major activities is a definable industry in its own right, with particular needs and prospects. Each has within it a number of smaller clusters, some of them highly specialised and frequently overlapping the other major clusters, in addition to often complex and substantial supply chains across the sub-region and beyond. We have identified those sites of existing or potential national economic significance, along with sites of existing or potential regional significance. The future economic viability of these sites for marine industry are considered critical to the continuing prosperity of the sub-region:

Ports and Shipping Activity: The most significant activities take place within the commercial Port of Southampton, at Fawley refinery and Terminal and 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 Medina.

Navel and Defence Activities: The army run military port, the Marchwood Seamounting Centre is located on the western shore of the River Test, opposite the Port of Southampton. Portsmouth Harbour contains several defence establishments; the Navel Base; the armament storage sites at Frater and Bedenham; Fleetlands (used for the repair and maintenance of helicopters) Horsea and Whale island used for military training purposes.

Marine Leisure Activities: The main concentrations of these being on the Lymington Harbour, the Hamble River and the River Medina at Cowes with other well developed centres at Chichester and Portsmouth Harbour. Activities are also located on the rivers Test and Itchen. Numerous firms are also involved in boat / ship building and repair. The Solent hosts numerous internationally recognised showcase events for the leisure marine industry including the annual Southampton Boat show and Cowes week. These activities makes a significant contribution to the tourism offering of the region.

9. Overcoming constraints to growth and ensuring continued prosperity of marine industry are real and pressing requirements. Bearing in mind that there is a degree of competition between the major clusters for available sites; the availability (or more accurately, the non-availability) of coastal locations is the most single determining factor for the prospect of marine industries. Suitable coastal land and water space, on which marine industries depend, is restricted by nature and by policy constraints.
10. Evidence from detailed interviews and consultations suggests that the position in some sectors is approaching or already at something of a 'tipping point'. There is already **a lack of available and affordable expansion or relocation**

sites or places where new marine industry ventures can be started. What becomes available tends to be either sites left by failed marine businesses or one cluster taking part off another cluster's resources, neither of which actually expands the overall value of marine industries in the Solent.

11. Pressure on the environmental resources of the Solent is a further and growing problem faced by marine industries in particular the difficulties marine industries face in implementing compensatory measures in the event that their proposals have an adverse effect on the integrity of European Sites; the effect of increasing flood risk; and the other effects of climate change.

Policy and Administrative Arrangements

12. There is also the difficulty of the complex administrative arrangements for planning the Solent. Change is difficult to achieve and extremely slow. There is a plethora of initiatives implemented by a wide range of organisations, and literally scores of statutory planning policy documents are emerging from the 14 local authorities that cover the coastal zone to low water. There are few mechanisms to ensure that an overall view is taken and the key decisions are properly addressed. In our opinion marine industries would be better served by focused action led by a few partners that strikes at the heart of the problems faced by marine industry.
13. Land use policy and guidance recognises the significance of the coastal zone but the emphasis is on safeguarding its environmental importance rather than on capitalising on coastal assets as an important contributor to the UK's future economic growth. There is no specific ownership of marine activity and little recognition of the marine sector and its component parts. Whilst the economic importance of specific marine activities are noted, there is little in the way of policy guidance and support for the future development of such uses, hindered by an apparent lack of a wide appreciation of the marine industry at national level and absence of clear and up-to-date guidance.
14. Objectives for the South Hampshire sub region as determined for the Partnership for Urban South Hampshire (PUSH) and reflected in draft RSS include ambitious employment and productivity growth targets in the period to 2026 – average productivity increases of 2.4% per annum and average employment growth of 0.6% per annum. The marine sector clearly offers significant potential to contribute both to employment and output growth increases in the sub-region.

Economic Significance of Marine Industries

15. Our economic analysis of marine industries demonstrates its critical economic importance to the Solent sub-region, the true value of which is often underestimated along with its future economic potential as driver for growth. The future of marine industries is therefore a highly significant matter for those seeking to support and implement the economic growth set out in the Draft South East Plan and the Regional Economic Strategy. The future role of PUSH is critical in this respect. It needs to develop spatial, economic and land-use planning policies that support the growth of the marine sector.

The value of Marine Industries to the Solent economy.

16. The Solent sub-region is home to at least 1,750 businesses directly operating within the marine sector. Together, these businesses and their core suppliers make a substantial contribution to the Solent economy which often goes unrecognised in planning and economic development strategies aimed at shaping the growth and diversification of this economically dynamic stretch of coastline.
17. Based on an empirical and statistically significant sample of established marine businesses in the Solent, the following key facts demonstrate the importance of marine industries to the sub-regional economy:
 - **25,000 direct jobs** are provided by the marine sector in the Solent. This is at least equivalent to the employment contribution made by the financial services sector to the Solent economy.
 - Including indirect and induced effects, the sector supports a total of **48,300 jobs**, of which nearly 80% are safeguarded within the Solent sub-region.
 - The marine sector relies on a diverse supply chain which alone supports around 12,500 jobs in activities including component manufacturing, wholesale retail, logistics and freight, business and financial services, clothing, catering and specialist equipment.
 - GDP and GVA contributions of **£3.6 billion** and **£1.9 billion** respectively. Significantly, this represents around **18% of the total value of the Solent economy**.
 - The sector makes a direct annual contribution to the National Exchequer of approximately **£672 million**.
18. Importantly, in order not to over-estimate the economic impact of the Solent's marine businesses, the estimates provided above do not take into account a number of notable exceptions. Indeed, the figures exclude the effect of:
 - Fawley oil and petrochemical facility;
 - Portsmouth naval base and other MOD establishments in the sub-region;
 - Tourism expenditure including cruise related visitors; and
 - Educational establishments.
19. Should these significant activities be included in the economic assessment, it is reasonable to assume that the whole marine sector generates a GDP of **£5.5 million** which represents around **27% of the total value of the Solent economy**. Furthermore, with the addition of these significant activities the total number of jobs supported in the Solent and beyond its boundaries may amount to approximately **77,000 jobs**.

Solent marine industries are a well established network of business activities which are strongly integrated with the rest of the sub-regional economy.

20. Around 80% of the total number of jobs supported by the Solent marine cluster are retained within the sub-region. This reflects the well established and strongly integrated nature of the cluster which ensures that economic benefits are maximised for other local businesses and their employees, many of which are small enterprises. Nearly 50% of the cluster's customers and over 40% of its suppliers are also located within the Solent sub-region.

21. Local businesses recognise the quality of the Solent as a competitive location from which to operate and the majority expressed their desire to remain in the sub-region. Indeed, the majority of core marine businesses consulted during this study highlighted that proximity to the waterfront represented the sub-region's key strength. Indeed, having good access to the water was identified as a key requirement for many established businesses in the area.

Solent marine industries are characterised by significant high-value / high productivity economic activities

22. Contrary to many common perceptions, the Solent marine economy is high value in nature. This is demonstrated by the survey sample, which indicated an average turnover of approximately **£125,000 per employee in the sector** which is far in excess of the regional average of £48,000 for all employment sectors in the South East. Moreover, the economic contribution of the marine sector in terms of sub-regional GDP (18%) is approximately double the contribution made in terms of employment numbers (around 10%). This reinforces the fact that the Solent marine sector is a high productivity sector and should clearly form a set of priority business activities which align with the policy focus 'Smart' growth advocated by the Regional Economic Strategy and draft South East Plan.

Marine businesses in the Solent sub-region have significant growth plans and aspirations which can bring substantial to the economy and growth agenda shared by the PUSH authorities.

23. During the three years to June 2007, over one third of marine businesses have significantly expanded their operations in terms of workforce growth, investment in assets or turnover. With regard to future plans for growth, nearly 60% of marine businesses intend to invest and expand over the next five years.
24. There exists a major opportunity for the Solent marine cluster to make a significant contribution to the PUSH authorities' employment and GVA growth targets set for the period 2006-2026. This study has shown that the marine sector is characterised by relatively high productivity levels. The growth value of these activities can be exploited to ensure that the target annual GVA growth rate is achieved in the South Hampshire sub region by 2026.
25. In employment terms, the PUSH authorities are pursuing a total net growth target of approximately 58,600 in the period up to 2026. By way of illustration, should the Solent marine employment base achieve a modest annual growth rate of 1% up to 2026, an additional 10,500 jobs would be created.
26. However, in order to ensure that the future economic potential of marine sector can realised for the benefit of the Solent and South East economies, it will essential that the public sector and its partners play a significant role in facilitating its growth and diversification. In particular, this will include the identification and protection of key waterside sites, provision of co-ordinated training and business support measures and the promotion of the sector to key policy makers in regional and central government.

Recommendations and Implementation

27. Our recommendations are framed to assist SEEDA and partner authorities to unblock the current and major constraints to growth as well as to ensure that strategic consideration is given to the long-term prospects for the marine industry. The key components of the Strategy are to:

- achieve national and regional support for Solent marine industry;
- promote innovation and growth and support the core marine clusters;
- safeguard strategic marine sites;
- address work force development;
- re-dress the economic/environmental balance;
- seek to provide affordable land and premises;
- respond to climate change and sea level rise;
- simplify, strengthen and more proactive administrative arrangements;
- consider long term strategic planning arrangements for the Solent.

Recommendation 1

SEEDA, the PUSH and other relevant authorities, and business partners should seek to influence Government to ensure that the national and regional significance of marine industries to the Solent area is recognised, for example in RSS and emerging government policy, and provides support for the firm foundation of marine industries in future Policy.

Recommendation 2

The Solent is the centre of UK marine industries and SEEDA, the PUSH and other relevant authorities and marine industries should raise the profile of the importance of the Solent as such and actively promote it as a place of growth and innovation.

Recommendation 3

Strategic marine sites of existing national and regional economic importance or with the potential to be of national or regional economic importance should be identified and safeguarded for marine employment use only in relevant Local Development Documents.

Relevant Local Development Documents should identify strategic marine sites of existing or potential local significance and either safeguard them for such use or provide clear policy support for them to be used for such uses. It is suggested that strict policy criteria are set that would need to be met before these locally significant sites could be used for non-marine employment purposes.

Relevant Local Development Documents should also recognise that key marine employment sites may not be limited to those with access to water. During the production of relevant Local Development Documents, authorities should take note of the requirements of marine industries in respect of these 'off coast' sites. The SEEDA and marine industries should work with local authorities to identify such requirements. Such realistic needs should be taken into account by local authorities in the identification of land for employment purposes.

Recommendation 4

The Port of Southampton is likely to require significant additional land to maintain its long-term competitive advantage in the future (this includes both operational and back-land for servicing and distribution). SEEDA and the PUSH authorities should work together with the Port to identify and safeguard land for future port-related use in Local Development Documents to secure the Port's future as a premier, global port and economic driver within the sub-region.

Recommendation 5

SEEDA should further co-ordinate existing recruitment and skills programmes, along with identifying where further investment is necessary in the sub-region to address the marine skills base shortage.

Recommendation 6

SEEDA, PUSH and other relevant local authorities working in partnership with Natural England, the Environment Agency and key elements of the principal marine industries should assess the feasibility of creating new habitats on at least a Solent-wide basis as a compensatory measure for the effects of the needed expansion of the marine industry.

Recommendation 7

SEEDA should emphasise to relevant local authorities the need for affordable land supply for marine uses. SEEDA, PUSH and other relevant local authorities should assess the feasibility of a range of fiscal measures and policy mechanisms to bring forward a supply of affordable employment land suitable for marine industries.

Recommendation 8

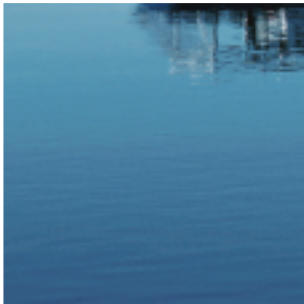
SEEDA, PUSH and other relevant local authorities, and marine industries themselves should seek to educate relevant bodies and organisations to enable the identification of the potential long-term planning solutions required to address the likely impact of climate change in respect of sea level rise. At the very least it should be made a priority that marine sites of existing or potential national or regional significance are protected from the implications of sea level rise.

Recommendation 9

Consideration should be given to the need to refocus support for marine industries. Existing bodies responsible for implementation of the marine planning consent procedures should be encouraged to work jointly to improve co-ordination and streamline and simplify decision-making for marine business.

Recommendation 10

Strategic planning decisions for the Solent should be made in the interests of supporting the growth of marine industries and the organisational structure should be redefined to enable this to happen.



1. Introduction

SOLENT WATERFRONT STRATEGY

1. INTRODUCTION

- 1.1 This report is the principal output of a commission from SEEDA to Adams Hendry Consulting Ltd (“Adams Hendry”), Atkins and Marina Projects Ltd (“MPL”) to produce a strategy for marine industries in and around the Solent.
- 1.2 In the report, we use the term ‘marine industries’ to describe activities, not necessarily industrial in the traditional sense, that require a coastal location or depend on, or are linked in a significant way to those that do. When we refer to ‘the Solent’ we mean the land and water between, and including, Chichester Harbour in the east and Hurst Spit in the west, also including the northern shore of the Isle of Wight. As the influences of marine industry are not confined to the coast, we have not set a fixed inland boundary.

The Consultant Team and the Steering Group

- 1.3 Atkins have taken the lead in recording and analysing the existing and future economic significance of the marine industry within the Solent waterfront. MPL have provided guidance on the leisure marine sector. Adams Hendry have dealt with planning policy, carried out the face-to-face interviews and brought together and edited the report.
- 1.4 The consultant team was commissioned in April 2007. The work has been overseen by a Steering Group whose membership has wide ranging experience of marine industries and policy making. A list of the members of the Steering Group is attached as Appendix 1. The consultant team met with the Steering Group regularly to share initial findings, discuss progress generally and receive guidance. The consultant team gratefully acknowledge the Group’s advice. However, the consultant team take responsibility for the views, analysis and conclusions presented in this report.

Our approach

- 1.5 As our brief requires, we have combined fact-finding and consultation with analysis, leading to conclusions and recommendations. Fact-finding tasks included a review of existing literature, a study of existing policies that apply to marine industries, and the identification and recording of key strategic sites for marine industries. A telephone survey of marine industries was undertaken to which 480 companies responded. The consultant team are grateful to those who helped in this way. The telephone survey was supplemented by 23 face-to-face interviews with representatives of a range of marine industries, local authorities and government agencies. We gratefully acknowledge the contributions of those we met, which have enabled us to obtain a clear view of the contribution that marine industries make to the Solent’s economy, their prospects, and the challenges they face.
- 1.6 Two events for marine industries were held during the study. An introductory presentation at Southampton Football Club’s St Mary’s Stadium on 27 April 2007, to which there was a general invitation to marine industries. This event

was attended by over 50 delegates. Some 30 invited representatives of the industry attended a participatory workshop at the Portsmouth Marriott Hotel on 5 July 2007 to discuss the potential global economic, environmental and land use changes (or future scenarios) that could arise over the next 10 – 20 years and to assess the future economic implications for the marine industry. Notes summarising the proceedings are included as Appendix 4.



2. Setting the Scene

2. SETTING THE SCENE

- 2.1 Tradition is of limited significance as a determinant of future prosperity. Sometimes, it can obscure the true picture. To an extent this is the case with marine industries in the Solent. Marine industries have long been central to popular imagery of the Solent. Portsmouth is the 'Home of the Royal Navy', Southampton the 'Gateway to the World' and Cowes the 'Mecca of World Yachting'. A century or more after they were coined, these descriptive tags remain in common use.
- 2.2 Whilst it is true that the area has kept the core of its marine industries at a time when many other British coastal conurbations have lost theirs, or have struggled to retain them in the face of widespread social and economic change, it would be delusional to believe that the Solent has retained the dominance in marine industries it once enjoyed. Over the past two or three decades, significant parts of the Solent's earlier maritime industrial base have disappeared.
- 2.3 It would also be a serious error to believe that the upheaval that has affected the Solent's marine industries over recent decades is over. Change is endemic and the Solent faces significant challenges if the traditional slogans are to remain relevant for much longer.
- 2.4 One obvious long-term trend has been the decline in naval activity, which has been reflected in the Royal Navy's reduced presence in the Solent. The Government has recently announced that the Navy's surface fleet will still mainly be based in Portsmouth, but until that decision was made, the future of the Base and Dockyard hung in the balance. Although there are grounds for optimism that both the Base and Dockyard will remain the focus of a significant marine industry cluster, the future fleet will, at least in numerical terms, be reduced.
- 2.5 The tag 'Gateway to the World' can still reasonably be applied to the Port of Southampton, but its historic dominance over other such 'gateways', implied in the slogan, is less apparent. Since the passenger liner trade, which gave rise to the original slogan, succumbed to the competition of air travel in the 1960s, the Port has concentrated on freight and cruise. For freight, it is now better connected than in its so-called 'heyday', with regular services to over 100 countries. Last year it handled more freight (40.6 million tonnes) and more passengers (840,000 this year) than ever before in its history.
- 2.6 Notwithstanding these facts, the overall picture over the longer-term is of decline in some trades relative to competitor ports. Felixstowe, which was a small dock when Southampton opened its first container berths in 1968, overtook Southampton more than a decade ago to become the UK's largest deep-sea container port and has consent to expand, as does its sister port of Harwich. Consent has also been given for a new deep-sea container port on the Thames at Shellhaven. North continent competitors, such as Le Havre, Zeebrugge and Antwerp, have grown faster than Southampton. Backed by their national and regional governments, these ports have all built additional capacity and have more planned.

- 2.7 It is also true that Cowes, Lymington and the Hamble remain among the best addresses in the yachting and marine recreation world, but they now have many challengers worldwide. Many local marine industries that previously supported that image have disappeared or declined significantly, with several household names in recreational boat building failing to survive.
- 2.8 As a context for the study, the following paragraphs outline how each of the main marine activities represented in the Solent has faced and responded to change over the past few decades.

Defence and shipbuilding

- 2.9 Changes affecting the defence industry have been substantial, wide-ranging and global. The Royal Navy has downsized from a force designed to protect an Empire to the very much smaller one needed in a new and unpredictable world order. This process has resulted in large-scale reductions in service and civilian employment. Although Portsmouth remains a base and a dockyard (unlike, for example, Portland in Dorset and Chatham in Kent) the last decades of the twentieth century saw civilian employment in Portsmouth's naval dockyard decline from an estimated 20,000 in 1950 to around 2,000 today. However, Portsmouth's future as a base and dockyard has, at least for the foreseeable future, recently been secured. Whether there may still be some further contraction in Ministry of Defence (MoD) land requirements, as some of our consultees suspect, remains to be seen.
- 2.10 The post-war decline of British shipbuilding from its former position of world eminence has locally meant that large shipbuilding has disappeared from the Test, Itchen and Medina, where it once had a significant presence. However, although Vosper Thornycroft's ("VT") 2006 move from its Woolston site marked the end of an era for Southampton, it reintroduced warship construction to Portsmouth. Recent confirmation that the aircraft carrier replacement programme is to proceed and of the merger between BAE Systems and VT, give grounds for optimism that a period of consolidation and opportunities for growth may follow. VT are shortly to extend their main building in the Dockyard, and there is scope within the base for further expansion if required. Some further rationalisation will take effect shortly with VT's intended relocation of its Halmatic division from Portchester to the Naval Base.
- 2.11 It should also be noted that the margins between ship and boat building are indistinct. Some of the recreational craft now being constructed in the Solent are large vessels. Increasing affluence worldwide has seen demand for larger 'super yachts', which could be constructed in the Solent if suitable sites were available.

The Port of Southampton

- 2.12 The recent history of the Port of Southampton shows that its fortunes depend on its ability to exploit its unrivalled assets as a sheltered, lock-free port at the head of a deep estuary centrally located on the UK's coast and facing the main trade route between Europe and the rest of the world.

- 2.13 When the passenger liner trade disappeared, the advantages that had made Southampton the UK's premier large ship liner port were precisely what the world's container lines also sought - along with the flexibility to introduce entirely new methods of working. Over the past fifty years, the shipping container has revolutionised world trade and permanently changed ports and freight transport. The revolution continues to spread into other trades and new markets, both as an enabler of trade and a reactor to its subsequent growth. This has presented ports such as Southampton, which can in principle meet the shipping lines physical and locational requirements, with both great opportunities and formidable challenges.
- 2.14 The shipping lines have increasingly sought to integrate all modes of freight transport from the origin of an international journey to its destination. The greatest obstacle to the achievement of this objective has been found to lie less in the sea voyage and more in the capacity of ports and national transport systems (road, rail and water) at either end of the journey.
- 2.15 Southampton has been fortunate, as a result of strategic development decisions made as long ago as the 1920s, to have been able to expand up river along the east bank of the River Test. This potential has now been exhausted. Without consents for further expansion, the Port can only make more efficient use of its existing land. This process cannot continue indefinitely.
- 2.16 The size of the largest containerships has significantly increased. Whilst increased length and breadth also have considerable consequences for port operation and the space required for berthing and cargo handling, for most ports the defining parameter tends to be the provision of sufficiently deep water over as long a tidal window as possible. Southampton's main approach channel was last deepened in 1997 and the port is shortly to seek consent for a further dredge to enable it to continue to handle its customers' ships.
- 2.17 Until recently the planning history of the Port shows an unusually thorough (and in a national context, arguably unique) degree of strategic anticipation of the long-term needs of the Port. However, the measures that were taken several decades ago to secure the Port's future have failed to deliver that objective. The circumstances bear brief retelling because of their relevance to this study.
- 2.18 In 1965, the Government of the day sanctioned the purchase by the nationalised British Transport Docks Board of partially reclaimed land at Dibden Bay for expansion of the Port. The land was then allocated in the statutory development plan for deep-water activities. Further land was allocated at Nursling between the railway and M271 to be reserved, by the use of legal agreements, to port-related uses, such as storage and distribution.
- 2.19 In the 1970s and early 1980s, the Port of Southampton struggled to survive in the face of a succession of labour problems that hampered its ability to adapt to new ways of working. Its performance fell far below its potential. Although many of the world's container lines reaffirmed a preference for Southampton as their UK base, the Port was unable to take full advantage of opportunities offered. Ports that were not subject to the National Dock Labour Scheme (NDLS) such as Felixstowe, profited at Southampton's expense. The Port

made virtually no call on the allocated land at Nursling and the, by now fully reclaimed, expansion land at Dibden. Under pressure to avoid unnecessary allocation of greenfield land, the planning authorities removed the requirement that occupiers of premises at Nursling should be Port-related. Today, the Nursling Industrial Estate, which is now developed, contains few Port-related industries.

- 2.20 In 1989 the NDLS was abandoned and trade through the Port grew fast. In 2000, the Port submitted applications for consent to develop Dibden reclaim for a new deep-water container, ro-ro and aggregates terminal. Following a public inquiry, during which the reclaimed land was designated as a Site of Special Scientific Interest, in 2004 the Government refused consent for the proposal. The reasons for refusal ultimately rested on the inquiry Inspector's inability, and the Government's subsequent unwillingness, to identify an overriding policy need for the proposal in the face of its environmental impacts.
- 2.21 The current policy position is described in Section 3. In summary, the reclaimed land remains identified for port development (subject to the satisfaction of environmental and infrastructure criteria) in the current development plan, the latest part of which was adopted in 2006. Also in 2006, the Government also decided to exclude the reclaimed land from the New Forest National Park.
- 2.22 The period of labour unrest was also one of economic uncertainty. As a consequence, and also because of increases in vessel size and draught, in the early 1980s the shallower parts of the Docks became underused. The oldest group of docks were given over to urban use - these became Ocean Village. The expectation grew that the Docks generally would be a continuing source of land for 'urban regeneration'.
- 2.23 Had the decision to pass the Ocean Village land out of Port use been delayed until after the abandonment of the NDLS, it would probably not have been made. Unconstrained by the NDLS, Southampton could compete more evenly with north Continent ports and non-Scheme UK ports, at a time when world economic confidence and trade volumes were also rising. These were the triggers for revival of trade through the Port, which has recently accelerated.
- 2.24 Not all trade through Southampton is containerised. Deep-sea ro-ro trades have similar locational and water depth requirements and our consultations confirmed that, as with deep-sea containers, Southampton is considered to be the preferred location to serve the UK. The constraint on expansion is space on land to handle cargoes. In an effort to create more land, the Port has constructed two multi decked vehicle storage areas, effectively adding to the available land at the cost of reducing its flexibility in port use. A third is planned, but the scope for more is limited.
- 2.25 Recent growth has been rapid. In 2006 9% more containers were handled than during the previous year and in the first half of 2007 the total grew by an unprecedented 35%. These compare with forecasts contained in the governments recent interim ports policy review document that there is likely to be a 4 to 5 % per annum growth in load on – load off container traffic in the period up to 2030. In 2006, Southampton also recorded 250 cruise ship calls a

rise of 9% on the previous years (according to a 2004 cruise tourism study study, each call was then worth an average £1m to the local economy).

- 2.26 To date the Port has coped with such high rate of growth by reclaiming occupation of a number of sites in the Docks that have historically been let to uses that once were either not port related or once related to the port but no longer are. This source of 'additional' land is almost exhausted. The Port has also begun a large-scale investment programme to re-equip the container terminal - modernising the internal infrastructure of the terminal, and re-quaying and deepening the two original container berths so that they can handle the world's largest vessels. Provided it gains consent for these works, the Port forecasts that it will be able to cope with growth rates as advised by the Government to around 2020. However, since recent growth has been far in excess of those rates, additional land is likely to be required several years before then.
- 2.27 The direct connectivity between increased activity in the Port and intensification of residential and other urban uses in the encircling urban area has important lessons for planning policy. A consequence of the overall intensification of the use of the Dock Estate for operational use is that subsidiary activities such as transport depots, open storage, warehouses and distribution depots, have progressively been excluded from the Docks. The Nursling site, which was intended to provide for such activities, has now been developed for other uses. Port-related uses have to look for alternative locations in the surrounding area. This is not easy because the land on the periphery of the Docks, which used to accommodate lower value uses related to the Port, continues to be redeveloped for high value uses such as residential and retail. Our consultees recorded that land for port-related industries is in short supply, and for larger areas the only available sites are at a considerable distance, for example Andover. The unavailability of suitable back-up land outside the Port is clearly a constraint on the amount of trade that can be handled but also means that business decisions are currently being made not to pursue opportunities to expand trade.

Other Ports

- 2.28 We have dealt at length with the position of the commercial Port of Southampton because of the scale of its needs and economic significance. However, the statutory Port of Southampton includes not only the ABP Commercial Docks but also wharves on the Itchen and Test; ESSO's Fawley Marine Oil Terminal, the largest free-standing oil terminal in Europe; BP's Hamble Oil terminal; the Isle of Wight and Hythe ferry terminals and the MoD's Marchwood Seamounting Centre, the UK's only military port, which is a strategic naval facility under the command of the Portsmouth Naval Base Commander.
- 2.29 Wharves on the Test and Itchen (and others in Portsmouth and Langstone Harbours) are largely used for the import of marine aggregates, which is an important construction and maintenance material, in shallow draught vessels. The number of operational wharves has reduced over the past few decades and the operation of several of those that remain are constrained by poor

vehicular access and the growing proximity to residential areas and to nature conservation designations.

- 2.30 There are no known plans to extend the capability of the marine oil terminals, both of which are significant elements of national energy infrastructure. The MoD intends to expand the capacity of the Marchwood Seamounting Centre generally within its existing footprint.

Marine Leisure Industries

- 2.31 As will be evident from the above, the ports sector is populated by a number of large organisations including many multi-national companies. The same is true of the Solent defence industry. Both sectors also contain many smaller firms, but the basic infrastructure around which they operate is normally in the hands, or is the responsibility, of the larger players, who have the resources to maintain, amend and extend it where and when necessary. In contrast, the marine leisure sector is largely the province of smaller, often much smaller, enterprises, few of whom are in a position to fund or implement large-scale changes in infrastructure should they be required. This is reflected in the way the sector has responded to past change and is also fundamental to its future prospects.
- 2.32 The changes with which the Solent's marine leisure industries have had to contend have been as fundamental as those that have affected the other two main marine sectors. The post-war decades saw a rise in the popularity of boat ownership, and a significant expansion of moorings in estuaries such as those of the Hamble, Lymington, Medina, Test and Itchen, as well as Chichester, Langstone and Portsmouth Harbours. This was accompanied by the introduction at several locations in the Solent of the marina concept, latterly associated with residential and other marine leisure facilities.
- 2.33 These trends took the marine leisure sector directly into the realm of the planning authorities and environmental conservation agencies much earlier than other marine sectors. The number of moorings in the Solent grew rapidly in the 1970s but stabilised under a ceiling figure of around 25,000, fixed by planning policies and substantially unchanged for two decades. Increasing affluence has led to an increase in the average size of recreational craft. From the moorings perspective, this probably means that fewer craft are being accommodated on moorings, with more onshore storage. Planning policies have also restricted the development of further marinas to the redevelopment of the existing built coastline. Planning policies have so far had a much greater role in shaping (usually by constraining and restricting) the marine leisure industry of the Solent than has been the case in the other two sectors.
- 2.34 For the majority of recreational craft, wood has given way to glass fibre and other modern materials, although mastery of both the newer and traditional types of construction remains a premium skill, especially for the manufacture of custom-built boats and equipment, which is well represented in the Solent. As a leisure, and therefore essentially consumer-led, industry the marine leisure sector has suffered at times of economic uncertainty and when consumer confidence is low.

- 2.35 At a particular time, the health of the marine leisure industry has tended to reflect relative affluence and consumer confidence and preferences. The price of an inability or unwillingness to react to changes in economic conditions or adapt to new consumer preferences has been down-sizing or closure. Some well-known and previously respected names have disappeared from the Solent over the last twenty years. Others remain, along with a mix of smaller firms, often making bespoke products, a number of them with a worldwide reputation.
- 2.36 Whilst the nature and scope of water recreation has widened to include new leisure activities, such as sail boarding and kite surfing, sailing and racing remain the backbone of the industry in the Solent. The marine leisure industry itself has also broadened so that activities such as education, crew training, and eventing have assumed a greater status.
- 2.37 As with the other staple marine industries in the Solent, a most significant trend has been the globalisation of manufacturing and other skills. Competitors can be in any of several established and newly founded areas in the world. Consultees explained that in several locations the basic infrastructure has been provided with government assistance. The UK generally has become a high cost location for manufacturing, with the price of land and premises being a significant factor in the Solent. This has meant that the industry has therefore found it difficult to establish new manufacturing capability in the face of competition from other land uses.



3. The Existing Policy and Strategy Context

3. THE EXISTING POLICY AND STRATEGY CONTEXT

- 3.1 This section summarises and analyses relevant policies and strategies relevant to marine activity within the study area, at national, regional and local levels. A detailed analysis of the policies and strategies is contained at Appendix 2.
- 3.2 Planning and policy-making generally are in a state of some flux. Sweeping changes to the development plan system introduced by the Planning and Compulsory Purchase Act 2004, including the introduction of Regional Spatial Strategies (RSS) and Local Development Documents (LDD), have yet to fully work through to replace the existing system. The Government has recently suggested further changes, partly to simplify a system that many (including most of our consultees) find over-complex. Proposed measures include the establishment of a new method of considering applications for major infrastructure, which would include port and port expansion proposals
- 3.3 The Government is also currently reviewing 'Modern Ports', the present UK policy for ports, the conclusions of which will be extremely significant for the Solent, and for the Port of Southampton in particular. We have already noted that the failure of 'Modern Ports' to support the need for expansion of the Port of Southampton was a key factor in the refusal of consent for the Dibden Terminal proposals.
- 3.4 Implementation of European legislation affecting marine industries, in particular the Habitats and Water Framework Directives, is not yet complete. Lessons learnt from their implementation so far may yet change future planning policy interpretation and have direct implications for the viability of individual developments.
- 3.5 The recent Marine Bill White Paper has the stated aim of delivering the Government's vision of clean, healthy, safe, productive and biologically diverse oceans and seas. Proposals include a new UK wide system of marine planning that will involve the production of a new UK wide marine policy statement which will be implemented through a series of local marine plans applying to specific geographical areas. A new Marine Management Organisation ("MMO") is proposed, which would be responsible for future strategic planning. The proposed suite of proposals also includes a 'streamlined, transparent and consistent system' for the licensing of marine developments.
- 3.6 It is unclear how these proposals would connect with existing plans and strategies, for example existing local development plans. Proposals by marine industries frequently span the administrative divide between the water and the land. In these circumstances, the introduction of a new consenting body is much more likely to complicate consent procedures than simplify them. Marine industries may have cause to be concerned about the White Paper's emphasis on environmental protection, as it makes little concession to economic needs.
- 3.7 At the national level, existing land use planning policy for the Coast is set out in Planning Policy Guidance Note 20: Coastal Planning (PPG20). This PPG has remained unchanged for 15 years, a period which has seen the introduction of

most of the current environmental legislation and regulation affecting the coast and a substantial shift in the national and world economies. Consequently, PPG 20's appreciation of the value of economic use of the coast is severely dated. This contributes to our view that the overall balance of official policies for the coast is uncoordinated and generally significantly out of kilter with the reality of the economic significance of marine areas to the UK economy.

- 3.8 'Modern Ports' and its ongoing review does at least recognise the economic value of the ports industry to the UK economy and acknowledges that demand for port traffic is likely to exceed available capacity over the next decade. However, its convoluted style and lack of specificity reduce its effectiveness in supporting proposals for new development. Its support for efficiency improvements in existing infrastructure is understandable but, in our experience, is frequently used as an excuse to delay the provision of essential infrastructure.
- 3.9 The recent Ports Review Interim Report (July 2007) recognises that this could have the potential to significantly constrain future economic growth, as could congestion on port access routes and the wider inter-urban network. The Government's view is that commercial port operators are best placed to make decisions about where and when to invest in the port sector – i.e. the ports industry is market led. The Interim Report rules out the preparation of locally or regionally determinative ports policy, arguing that the Government's main responsibility is seen as to create the conditions in which investment is encouraged, and yet sustainability is ensured. Although there is support for safeguarding significant port facilities, there is no reference to specific facilities or individual ports. The indications are that it remains unlikely that any site-specific guidance or priorities for port related development in the UK will emerge at the national level as a result of the review of UK ports policy. Taken alongside the deficiencies in regional policy described below, this is a serious handicap to national support for growth of the Port of Southampton.
- 3.10 The emerging Regional Spatial Strategy (RSS) for the South East will establish Government policy for the region. When approved by the Secretaries of State, RSS will be replace RPG9 as part of the statutory development plan. A draft RSS has been examined in public and the Secretary of State's modifications are anticipated in 2008. The examining Panel's Report has recently been published and identifies several deficiencies in draft RSS's treatment of economic growth generally, in particular the vacuum on regionally significant development. The Panel recommends that draft policy (RE2) be modified to include a requirement for local authorities to identify significant employment land for those sectors showing potential for growth in that part of the region. In this context the Strategic Development Areas in Southern Hampshire and the regional hubs and gateways are suggested as potential locations for major employment development.
- 3.11 The Panel's report acknowledges the significance of this Study and the threats to marine industries on waterfront sites from higher value uses and the wider problems experienced by industries that it describes as "within the supply chain for marinas and ports". The Panel recommended strengthening draft RSS policy (RE2) to safeguard key marine-related sites in LDDs. Whilst this is a welcome conclusion, it is ironic that (in line with the Ports Review Interim

Report) the Panel was unable to recommend a similar policy for the growth and expansion of the Port of Southampton itself. However, in a separate decision, the Secretary of State, has recently extended the life of the policy in the Hampshire Structure Plan that allocates land at Dibden Bay for port uses requiring access to deep water.

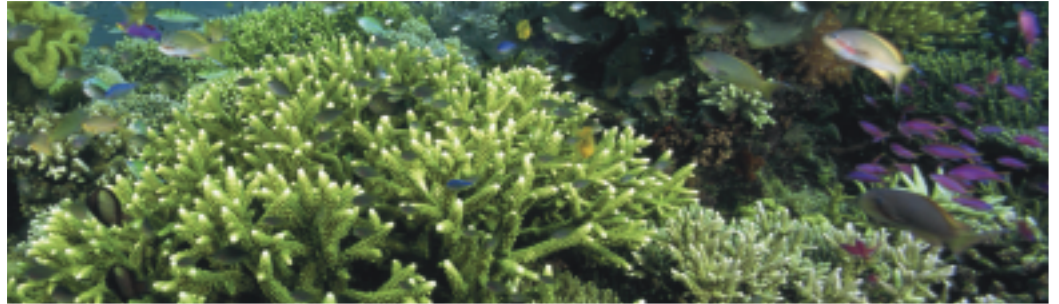
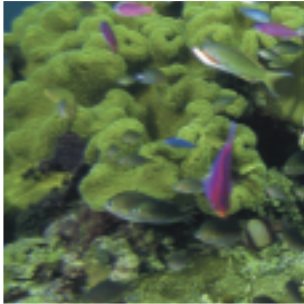
- 3.12 Whilst no specific section of the draft RSS considers the coastal zone as a separate entity, general policies for the coast are included in other region wide policy sections such as 'Sustainable Natural Resource Management' (Policy NRM6). Where policies are provided for the coastal zone they concentrate on environmental protection, climate change and the effects on the coastal zone.
- 3.13 The emerging sub-regional policies relevant to the majority of the Solent coastline (the South Hampshire sub-region) also do not recognise the importance of marine activities within the area. The only mention of anything to do with marine activity is a recognition that the area has excellent transport links by sea, a policy requirement that the transport and planning authorities will work together to manage the strategic transport network for longer journeys (especially to and from the Ports of Southampton and Portsmouth and Southampton Airport), and statements that the ports of Southampton and Portsmouth are both international gateways and employers of sub-regional and local significance respectively. The emerging sub-regional policies themselves fail to identify the marine activity sector (irrespective of its overall importance) let alone encourage it to the benefit of the economy of the region.
- 3.14 Whilst the sub-regional strategy provides a brief (albeit, we think, inaccurate) description of the economic importance of the ports of Southampton and Portsmouth the suggested policies which follow concentrate on providing sufficient land to accommodate the general employment uses found within Use Class B1, B2 and B8. No economic guidance encouraging the specific aspects of marine activity to the benefit of the regions economy is provided. Regional policy, including that specifically relevant to the study area does not 'own' the marine activity that is occurring in this location.
- 3.15 At the local level, land use policies concentrate on specific detailed matters such as the provision of moorings or the principles of development on the developed or undeveloped coast. Some local plans do safeguard existing coastal sites, in particular in relation to boatbuilding activities, for uses requiring access to water. However, there are also restrictive policies for further marina and water-based recreational uses and development of associated marine infrastructure such as jetties, slips and pontoons with concerns about environmental capacity of the area to deal with additional growth. The emphasis on environmental protection and the interconnected pattern of environmental designations along the Solent coast means that in practice obtaining planning consent for any significant new coastal development would be a complex and difficult process.
- 3.16 Policies for the developed stretches of the coast facilitate a range of different uses and particularly seek to promote residential development or development for a mix of uses. As a consequence of the successive implementation of such policies, many urban-based marine employment sites are surrounded by residential development and mixed-use development with little room for

expansion and where expansion may be possible, there is a threat of development being refused where uses are viewed as have an unacceptable impact on the amenity of nearby dwellings.

- 3.17 There are very few large strategic employment allocations in existing Local Plans with coastal access and even fewer potential future employment sites given the increasing coverage of environmental designation along the coastline and the loss of suitable land to other uses as a result of past land-use policies and decisions, perhaps most recently, the development of Gunwharf Quays in Portsmouth for a mix of retail and leisure development.
- 3.18 There is limited recognition that marine activities cross local authority boundaries, the most extreme example being the statutory boundary of the Port of Southampton which includes parts of the coastline that are in seven different local authority areas but only referenced in two. As such there is no coordinated or particularly consistent approach to coastal zone planning at the local level.
- 3.19 The overall conclusion in respect of land use policy and guidance is that whilst the significance of the coastal zone is recognised there is an emphasis on safeguarding its environmental importance rather than on capitalising on coastal assets as an important contributor to the UK's future economic growth. There is no specific ownership of marine activity and little recognition of the marine sector and its component parts. Whilst the economic importance of specific marine activities are noted here and there, there is little in the way of policy guidance and support for the future development of such uses, hindered by an apparent lack of appreciation of the marine industry at national level and absence of clear and up-to-date guidance. Where there is local policy guidance, this tends to follow the national and regional line, which is generic and general, with little local creativity or promotion of marine activity at the local level as important strategic economic assets.
- 3.20 A range of economic impact studies has been carried out over the years but none have had a consistent methodology or comprehensive definition of the marine sector.
- 3.21 Against this background, it can readily be seen that there are no clear national or regional policy incentives or 'drivers' to support the growth of marine industries within the study area or to require local authorities to make provision for their needs. The single exception is the saved structure plan policy for Dibden Bay, subject to the satisfaction of criteria. However, its eventual incorporation into adopted RSS is not supported by the EiP Panel's report or national port policy. The saved structure plan policy for Dibden Bay will therefore remain part of the statutory development plan until RSS is approved by the Secretary of State including a policy that 'expressly replaces' it. There are, on the other hand, frequent references in plans and policy statements to the constraints on and difficulties associated with development in the coastal zone. In designated areas, the provisions of EC Directives, as interpolated into UK law by Regulations have mandatory force.
- 3.22 Objectives for the South Hampshire sub region as determined for the Partnership for Urban South Hampshire (PUSH) and reflected in draft RSS include ambitious employment and productivity growth targets in the period to

2026 – productivity increases of 2.3% per annum and approximately 59,000 additional jobs. The marine sector clearly offers significant potential to contribute both to employment and output growth increases in the sub-region over this period.

- 3.23 The Regional Economic Strategy (RES) is built on the three key objectives of: *global competitiveness*, something which marine activities and facilities in the study area are well placed to deliver; *smart growth*, this includes the need for an increasing proportion of economic output to be attributable to new and improved products and services something to which the marine sector can make a significant contribution as is reflected by the importance attributed by the RES to Southampton and Portsmouth Ports; and *sustainable prosperity*, again something which marine activities in the study area are well placed to deliver.
- 3.24 For the 'Coastal South East' the RES identified a range of priorities including maximising the potential of existing technological clusters (including marine) and recognising the importance of high value manufacturing and knowledge based supply chains. The RES stresses the priority of investing in the long-term sustainable growth of key ports including Southampton and Portsmouth. It also highlights that regionally important sectors such as marine will require measures to be taken which will ensure an adequate supply of land and premises.
- 3.25 Research into the South East Marine Sector published in 2003 (Business Issues, Prospects for Clustering) indicates that the majority of businesses involved in the marine sector are small, but the overall employment in the sector is dominated by a small number of large companies. The research further concludes that the true magnitude and breadth of the marine sector in the Solent sub region has not been adequately represented either from a marketing perspective or by individual firms.



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 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 containerhips 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).



5. Economic Impact of Marine Activities

5. ECONOMIC IMPACT OF MARINE ACTIVITIES

Introduction

- 5.1 This section provides an analysis of the economic impact of marine activities in the Solent sub-region. It is based on the marine activity definition set out previously in Section 4 and draws on the findings of the business survey set out in Appendix 5. The economic impacts have been estimated by the development of an empirically-based model which is founded on the statistically significant sample of marine businesses both of which are described in Appendix 5. This Section summarises the key impacts and highlights key business requirements for the future.

Approach

- 5.2 In establishing the economic impact of the marine sector in the Solent, the following steps were followed:
- Definition of the study area is taken to represent the Solent sub-region for which economic impact outputs are provided.
 - Analysis of baseline economic conditions in the study area against which the impacts of the marine sector can be measured.
 - Development of an economic impact model and quantification of outputs.

Exclusions and Limitations

- 5.3 It is important to stress that the methodology adopted for this study was considered to be the most appropriate basis for providing an empirically-based assessment of the economic significance of the marine industries in the Solent sub-region. However, as with all the methodological approaches available, limitations do exist which need to be emphasised.
- 5.4 As explained in this Section and Appendix 5, the economic impact assessment was based on the gathering of 'real' business data taken from marine and related businesses operating in the Solent sub-region. However, given the task of estimating the economic impact of all marine businesses in the Solent, the method requires a sample of businesses to be gathered which can represent the collective marine sector. Whilst the establishment of a sample frame ensures that a target number of responses for different business types can be set, in reality, it is not always possible to get a fully representative sample for all business types. This reflects a number of key factors:
- For specific business types / sub-sectors, there are only a small number of relatively unique, large businesses / activities which cannot be effectively 'sampled' in statistical terms: this would run the risk of significantly misrepresenting the contribution of relatively specialised activities.
 - The business survey yields a statistically unreliable response rate for some specific business types.
 - The population database from which details of individual businesses are obtained to make up the sample is not 100% complete. For a sample based methodology, the combined Experian / Thompson business database used for this study is recognised as the most comprehensive

available. Whilst other sources of business information could in theory have been used (such as members' details from local and regional business organisations), these were subject to confidentiality restrictions.

5.5 For the purposes of clarity and to assist in the interpretation of results of the economic impact assessment, the following exclusions have been made:

- Esso & Exxon oil and petrochemical operations at Fawley.
- Portsmouth Naval base (military & civilians on and off site) and other government defence establishments
- Cruise tourism effects (crew and visitor expenditure) – manufacturing activities and supply services to the ships themselves are not excluded;
- Education establishments

5.6 In addition to the methodological limitations explained above, there are a number of other reasons why these activities do not feature directly in the quantification of economic impacts:

- Firstly, the unique nature of these activities means that, within the scope of this study, it is not reliable to attempt to estimate their economic impact on a statistically significant sample survey basis. These activities warrant and require stand-alone assessment in order to yield reliable results. Indeed, as highlighted in **Appendix 2 (Table A2.2)**, a range of detailed economic impact studies have been conducted in respect of the Southampton cruise industry and the Portsmouth Naval Base.
- Secondly, the methodological approach adopted for this study enabled a robust estimate to be provided of the economic significance of 'typical' marine activities in the Solent which have not been documented elsewhere. Indeed, most of these businesses, which are diverse in nature, are classified as small and medium sized enterprises (SMEs).

5.7 Despite the above limitations, an indicative estimate of the economic impact of the excluded activities is provided later in this Section. This is intended only to provide an approximation of the complete economic impact of all marine activities defined as part of this study.

The economic assessment study area

5.8 Whilst other components of this strategy focus on the relatively narrow strip of coastline which accommodates the key strategic marine sites, it is necessary for economic impacts to be considered at a sub-regional level. This is important to ensure that statistically reliable results can be achieved and that the 'Solent' area is adequately defined in geographical terms for economic assessment purposes.

5.9 The Solent sub-region ("the economic study area") which has been defined for this element of the strategy is illustrated in Figure 5.1. This represents the area for which economic baseline data and economic impact outputs have been provided. From a statistical viewpoint, it is based on aggregations of ONS Middle Layer Super Output Areas. It has been informed by the location of responses received as part of the business survey described in Appendix 5. The economic study area includes all of the local authority areas of

Southampton, Fareham, Gosport, Portsmouth, Havant and the Isle of Wight, in addition to sections of the local authority areas of New Forest, Test Valley, Eastleigh, Winchester and Chichester.

- 5.10 For the purposes of the following baseline analysis, an additional area has been defined primarily for comparison purposes and for capturing data which is not available at a more detailed geographical level. It includes the whole of the districts and unitary authorities which are included in the economic study area either in full or in part (listed above) and neighbouring districts as shown on Figure 5.1. It represents a larger spatial unit than the main study area and is referred to in this section as the 'Solent Districts area'.

Baseline economic conditions

- 5.11 The following analysis includes a range of key economic indicators for the economic study area and wider Solent Districts area. This establishes the baseline conditions against which it is possible to measure the current economic impact of the marine sector and its supply chain.

Population

- 5.12 Table 5.1 indicates that the population of the economic study area in 2001 was 1,133,860, representing 78% of the total population for all Solent districts and 14% of the South East's population.

Table 5.1 – Population

Area	Population (2001)
Economic Study Area	1,133,860
Solent Districts	1,447,106
South East	8,000,645
England and Wales	52,041,916

Source: Census Area Statistics, NOMIS, 2001

Deprivation

- 5.13 The Indices of Multiple Deprivation (IMD) 2004 provide a range of measures relating to various aspects of deprivation including income, skills, quality of the environment and employment. An overall deprivation score is derived for each Super Output Area, where the higher the score, the more deprived the area is judged to be. By averaging the deprivation scores for each Super Output Area within each Local Authority, it is possible to derive an overall average deprivation score for each district within the economic study area.
- 5.14 Table 5.2 indicates that Portsmouth has the highest overall deprivation score and is ranked the 88th most deprived local authority in England (out of a total of 354). Portsmouth, Southampton, the Isle of Wight and Havant all appear within the top 50% of the most deprived districts in England.

Table 5.2 – Indices of Multiple Deprivation 2004

	Overall Deprivation Score	Overall Ranking (England)
Portsmouth	24.88	88
Southampton	23.72	96
Isle of Wight	21.08	126
Havant	20.08	137
Gosport	16.27	189
Chichester	10.7	279
New Forest	10.38	286
Eastleigh	8.91	311
Test Valley	8.71	317
Fareham	7.79	330
Winchester	6.99	338

Source: ONS, 2004

Economic Activity

- 5.15 Economic activity rates for the Solent districts area fall behind the regional level but are above the national rate: 77.2% of the working age population are classified as economically active in the economic study area, compared to 79.2% in the South East and 74.1% in England and Wales (see Table 5.3)

Table 5.3 – Economic activity rates

	Population	Working Age (16-64)		Economic Activity		Unemployed	
	No.	No.	% of total population	No.	% of working age	No.	% of economically active
Economic Study Area	1,133,860	719,585	63.5	555,808	77.2	20,918	3.8
Solent Districts							
Area	1,447,106	911,576	63.0	708,881	77.8	24,896	3.5
South East	8,000,645	5,097,804	63.7	4,037,629	79.2	133,481	3.3
England and Wales	52,041,916	33,240,406	63.9	24,641,559	74.1	1,250,093	5.1

Source: Census Area Statistics, 2001

Qualifications

5.16 Table 5.4 highlights that over a quarter (26.3%) of the population of the economic study area hold no qualifications, which is fractionally higher than that for the Solent districts area as a whole (25.5%) as well as the South East (23.9%). Similarly, the study area has a comparatively low proportion of well-qualified residents (Levels 4/5).

Table 5.4 – Qualifications

	Economic Study Area		Solent Districts Area		South East	
	No.	%	No.	%	No.	%
No qualifications	215,493	26.3	265,944	25.5	1,379,247	23.9
Level 1	149,177	18.2	183,715	17.6	987,835	17.1
Level 2	167,796	20.5	215,886	20.7	1,221,136	21.2
Level 3	78,742	9.6	100,100	9.6	530,682	9.2
Level 4/5	146,799	17.9	199,959	19.2	1,253,917	21.7
Other qualifications/ level unknown	61,546	7.5	76,779	7.4	393,490	6.8
Total	819,553	100.0	1,042,383	100.0	5,766,307	100.0
No qualifications	No academic, vocational or professional					
Level 1	1+ 'O' Levels/CSE/GCSE. NVQ Level 1, Foundation GNVO					
Level 2	5+ 'O' Levels + CSE (grade 1), 5+ GCSEs (grade A-C) School certificate, 1+ 'A' Levels/'AS' Levels. NVQ Level 2, Intermediate					
Level 3	2+ 'A' Levels, 4+ 'AS' Levels, Higher School Certificate, NVQ Level 3, Advanced GNVO					
Level 4/5	First Degree, Higher Degree, NVQ Level 4-5, HNC, HND, Qualified Teacher, Dentist etc.					
Level unknown	Level Unknown					

Source: Census Area Statistics, NOMIS, 2001

Occupation

- 5.17 The qualifications profile is reflected by the breakdown of occupation type (see Table 5.5). Compared to the Solent Districts and the South East, the economic study area has a lower proportion of managers and senior officials with a higher proportion employed in elementary occupations.

Table 5.5 – Occupational Structure

	Economic Study Area		Solent Districts Area		South East	
	No.	%	No.	%	No.	%
Managers and Senior Officials	83,216	12.9	112,890	13.8	751,872	16.4
Professional Occupations	62,661	9.7	84,590	10.3	528,477	11.5
Associate Professional and Technical Occupations	86,981	13.5	110,222	13.5	643,662	14.0
Administrative and Secretarial Occupations	87,846	13.7	110,772	13.6	653,187	14.2
Skilled Trades Occupations	75,677	11.8	95,382	11.7	480,822	10.5
Personal Service Occupations	48,703	7.6	61,666	7.5	334,204	7.3
Sales and Customer Service Occupations	59,671	9.3	72,357	8.9	376,588	8.2
Process, Plant and Machine Operatives	48,677	7.6	58,510	7.2	286,499	6.2
Elementary Occupations	89,682	13.9	111,016	13.6	540,625	11.8
Total	643,114	100.0	817,405	100.0	4,595,936	100.0

Source: Census Area Statistics, 2001

Sector Analysis

- 5.18 Tables 5.6 and 5.7 describe the industrial structure of the different study areas in term of both business units and employees. In broad terms, the economy of the economic study area is structured similarly to that of the wider Solent Districts area as well as the South East as a whole: the business services sector (including real estate and renting) is the single largest activity in the study area although it is less well represented compared to the region (31.3% compared to 34.4%).
- 5.19 With regard to manufacturing activity, the economic study area is over represented in terms of business numbers compared to the South East. Similarly, the transport and communications sectors are also more prevalent in the economic study area than they are in the region. This partly reflects the impact of marine activities on the industrial structure of the Solent sub-region.

Table 5.6 – Businesses by sector

	Economic Study Area		Solent District Area		South East	
	No.	%	No.	%	No.	%
Agriculture, hunting and forestry	103	0.2	239	0.4	1,325	0.4
Fishing	88	0.2	119	0.2	315	0.1
Mining and quarrying	28	0.1	57	0.1	257	0.1
Manufacturing	3,103	7.1	4,334	7.1	23,990	6.4
Electricity, gas and water supply	27	0.1	36	0.1	268	0.1
Construction	5,093	11.6	6,785	11.1	38,378	10.3
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	8,859	20.1	12,199	19.9	70,991	19.0
Hotels and restaurants	3,178	7.2	4,184	6.8	22,981	6.1
Transport, storage and communication	1,911	4.3	2,440	4.0	14,782	3.9
Financial intermediation	895	2.0	1,236	2.0	7,480	2.0
Real estate, renting and business activities	13,339	30.3	19,147	31.3	128,646	34.4
Public administration and defence; compulsory social security	383	0.9	619	1.0	3,384	0.9
Education	1,103	2.5	1,556	2.5	9,477	2.5
Health and social work	2,371	5.4	3,197	5.2	18,821	5.0
Other community, social and personal service activities	3,510	8.0	5,047	8.2	33,144	8.9
Total	43,991	100.0	61,195	100.0	374,239	100.0

Source: Annual Business Inquiry, NOMIS, 2005

Table 5.7 – Employees by sector

	Economic Study Area		Solent Districts Area		South East	
	No.	%	No.	%	No.	%
Agriculture, hunting and forestry	1,314	0.3	2,704	0.4	13,489	0.4
Fishing	111	0.0	154	0.0	427	0.0
Mining and quarrying	459	0.1	775	0.1	3,829	0.1
Manufacturing	53,963	10.4	68,142	10.1	330,186	8.8
Electricity, gas and water supply	1,927	0.4	2,113	0.3	16,349	0.4
Construction	26,137	5.1	33,845	5.0	163,681	4.4
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	97,454	18.9	124,310	18.4	709,760	19.0
Hotels and restaurants	36,378	7.0	48,986	7.2	253,835	6.8
Transport, storage and communication	27,287	5.3	33,155	4.9	227,727	6.1
Financial intermediation	17,282	3.3	21,019	3.1	127,429	3.4
Real estate, renting and business activities	87,316	16.9	113,276	16.7	767,014	20.5
Public administration and defence; compulsory social security	26,691	5.2	40,708	6.0	157,278	4.2
Education	51,245	9.9	67,214	9.9	347,977	9.3
Health and social work	63,823	12.4	86,872	12.8	419,527	11.2
Other community, social and personal service activities	25,249	4.9	34,012	5.0	197,456	5.3
Total	516,636	100.0	677,285	100.0	3,735,964	100.0

Source: Annual Business Inquiry, NOMIS, 2005

GDP / GVA

5.20 In order to estimate GDP for the economic study area, statistics provided by Eurostat have been used (Regional GDP Nuts III, Eurostat 2004). The latest data provided by Eurostat relates to 2004 which has been inflated to current prices by applying UK GDP annual growth rates for 2005 and 2006. This results in current estimated GDP values of:

- £35 billion for Hampshire and the Isle of Wight as a whole;
- £4.2 billion for Portsmouth;
- £5 billion for Southampton;
- £1.7 billion for the Isle of Wight; and
- £15 billion for West Sussex.

5.21 Taking into consideration the actual data provided for the geographical areas above, we estimate that the total GDP of the economic study area amounts to £20.2 billion. This includes an allowance for Solent areas outside Portsmouth, Southampton and the Isle of Wight based on the distribution of employment in these areas (approximately £9 billion).

5.22 In terms of Gross Value Added (GVA) and by means of comparison to GDP, Table 5.8 provides ONS data for Portsmouth, Southampton and the Isle of Wight by broad sector.

Table 5.8 – GVA by Sector (2004)

	Portsmouth		Isle of Wight		Southampton	
	GVA (£millions)	%	GVA (£millions)	%	GVA (£millions)	%
Agriculture, hunting and forestry	1	0.0	39	2.8	0	0.0
Industry, including energy and construction	761	21.4	264	18.8	787	18.6
Service activities	2,793	78.6	1,104	78.5	3,446	81.4
Total GVA	3,555	100.0	1,407	100.0	4,233	100.0

Source: ONS, 2004

Commuting

5.23 Table 5.9 summarises commuting patterns to jobs based on the economic study area. Taken from Census 2001 travel to work data, it shows that the Solent labour market is largely self-contained. This is an important finding for this study, as it indicates that much of the income to workers employed in the marine sector will be retained within the Solent area given that nearly 90% of jobs are filled by local residents.

Table 5.9 – Residence of Employees working in the Solent

	No.	%
Study Area	442073	87.8
Other	12370	2.5
Winchester	10904	2.2
Test Valley	10759	2.1
East Hampshire	6273	1.2
Chichester	3725	0.7
Bournemouth	3328	0.7
East Dorset	3012	0.6
Christchurch	2355	0.5
Salisbury	2153	0.4
Poole	1733	0.3
Arun	1466	0.3
London	1416	0.3
Basingstoke	823	0.2
North Dorset	325	0.1
Purbeck	301	0.1
Hart	258	0.1
West Dorset	248	0.0
Total	503522	100.0

Source: ONS, Census 2001.

Economic impact assessment***Background***

- 5.24 Appendix 5 provides a full account of the economic impact assessment as well as the findings of the business survey. This sub-section sets out the key results of the economic impact model and the outcomes of the business survey.
- 5.25 The business survey provided the empirical source of economic data for identified marine businesses in the economic study area. As described in Appendix 5, the business survey was used to provide a statistically significant sample, the results of which were extrapolated to provide a measurement of economic activity for the whole marine sector in the economic study area (with the exception of single large activities highlighted earlier in this Section).
- 5.26 The key data generated by the business survey and used in this assessment including the following:
- General company information
 - Turnover & profit information
 - Employment information
 - Supply chain demand and connectivity
 - Market / customer type and location
 - Current & future skill requirements
 - Future growth plans & requirements
 - Issues concerning the physical location of business operations.

- 5.27 The information was collected through a series of 20 minute interviews with 480 businesses located within the economic study area. This data was supplemented by additional company information provided by key businesses interviewed separately on a face-to-face basis. These interviews are described later in this report.

Business Survey Sample

- 5.28 The sample frame was taken from the Experian business database and the Annual Business Inquiry. Actual business contact details were provided by the Experian database which related to listings from Yell, Thompson and BT business lists. Core marine businesses were identified using approximately 180 detailed activity definitions (as listed by Yell and Thompson). In addition, around 50 other business activity types were included in the sample frames for the purposes of 'screening'. This was considered important in order to identify businesses which are not classified as being core marine activities but potentially rely significantly on the marine sector (for example engineers and financial trade services).

- 5.29 All 480 responses from the survey relate to businesses which either:

- operate directly as one of the 18 core marine activities defined in Section 4 (385 businesses); or
- are classified outside our marine definition but rely significantly on serving the core marine activities (95 businesses). Relying significantly on marine businesses was defined as at least 50% of turnover being sourced from one or more of the 18 core activities.

- 5.30 It is important to highlight that the sample for this quantitative assessment included private sector business types only. Consequently, public sector activities including defence and education activities are largely excluded from the analysis.

- 5.31 In terms of estimating the total number of marine and closely related businesses in the economic study area Section 4 described the difficulty in sourcing a single data set which can provide a reliable measurement. Indeed, the lack of comprehensive statistical information available for marine activities reflects at least in part the need to conduct this study.

- 5.32 Despite the limitations to estimating the total 'population' of the marine sector Appendix 5 describes how we have used both the Experian business database and the Annual Business Inquiry (ABI) to provide these headline figures. It shows how the ABI implies a potential total of 2,317 businesses in the study area compared to approximately 1,415 derived from Experian. Given the constraints created by SIC definition, the ABI data is likely to include a range of businesses which are not closely related to the marine sector. Conversely, whilst more accurate in terms of business type definition, the Experian dataset is not complete as all relevant businesses will not be listed.

- 5.33 Consequently, having closely analysed the best available information, we estimate that there are approximately 1,750 businesses in the economic study

area that can reasonably be classified as operating directly in the marine sector or being significantly reliant on the sector. On this basis, our survey sample represents approximately 27.5% of all core marine sector businesses within the study area.

- 5.34 This provided a strong statistical foundation on which to extrapolate the business survey findings to resemble the marine economy of the economic study area.
- 5.35 In terms of marine sector jobs, analysis of both the ABI and Experian resulted in separate estimates which yielded very similar results for total employee numbers (27,000 jobs).

Business Survey Sample Frame

- 5.36 Based on the 18 marine activity definitions, the business survey adopted a stratified sampling frame which provided the best possible fit to be representative of the wider marine-related sector population (see Table 5.10). By re-categorising the sample into the Experian business database definitions it was possible to make a comparison of the proportional number of businesses within our sample with the wider population. In addition to providing a sample frame by activity, it was also stratified by business size (see Table 5.11).
- 5.37 With regard to 'other marine sector dependents', these included businesses that were not wholly dependent on the marine sector but at least 50% of their turnover could be attributable to one or more of our defined 18 marine activities. Consequently, in order not to over-estimate the economic contribution of these businesses, the model assumes that only 50% of turnover and employment supported by these businesses was included in the economic impact assessment.

Table 5.10 – Sample Frame by Sub-Sector

	No in Sample	Proportion of Total
Oil & petrochemicals	7	1.5%
Marinas, berthing facilities or supporting services	35	7.3%
Leisure activities located close to marinas/berthing	34	7.1%
Cruise industry and supporting services	3	0.6%
Defence activities (particularly naval);	1	0.2%
Commercial port activities (containers);	3	0.6%
Commercial port activities (Bulk cargo other than oil)	3	0.6%
Commercial port activities (Ferry services, not cruise)	6	1.3%
Commercial port activities (Cargo administration);	3	0.6%
Transport logistics relating to ports;	17	3.5%

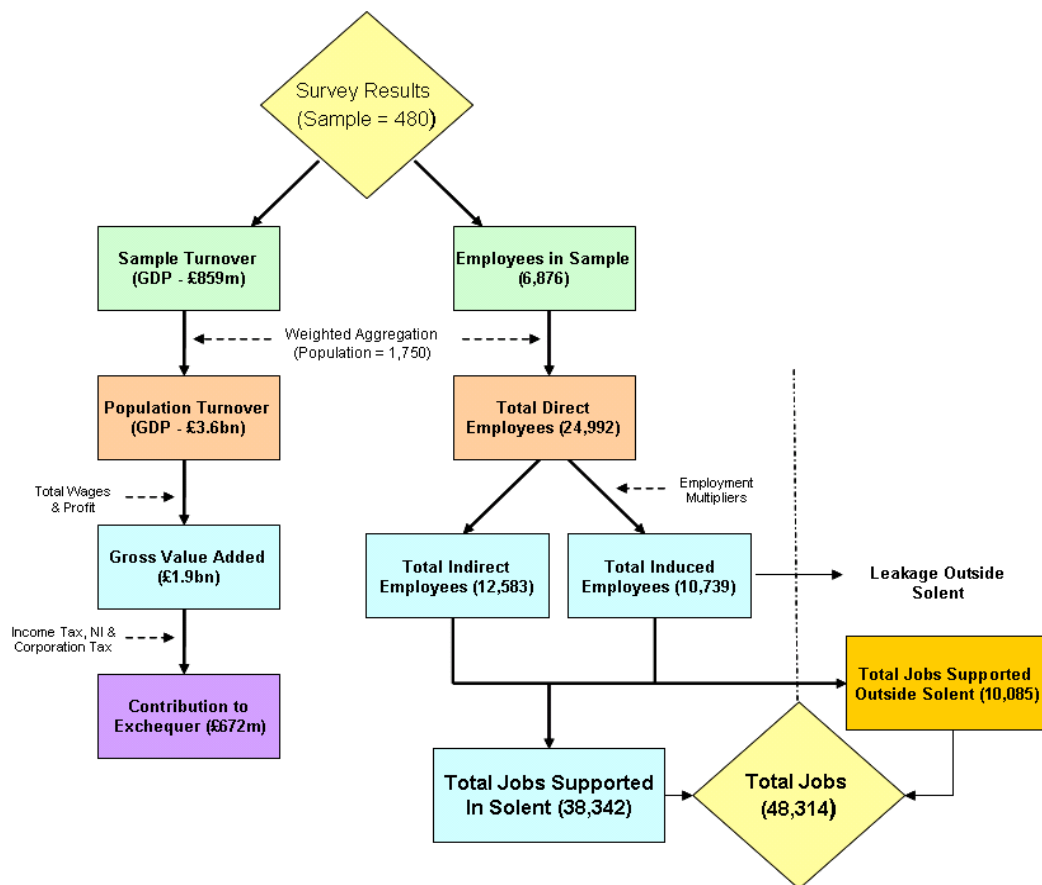
Manufacturing - Ships, boatbuilding & repair	77	16.0%
Manufacturing - Marine and related equipment	78	16.3%
Marine services (Insurance, brokerage etc)	86	17.9%
Fisheries	13	2.7%
Minerals	3	0.6%
Marine related education & research	1	0.2%
Marine Related Retail	15	3.1%
Other marine sector dependents	95	19.8%
	480	100.0%

Table 5.11 – Sample Frame by Size of Company

	No in Sample	Proportion of Sample
<u>By Number of Employees</u>		
Sole Trader	59	13.0%
2-5	173	38.2%
6-10	88	19.4%
11-20	64	14.1%
21-50	48	10.6%
51-100	10	2.2%
101-200	6	1.3%
201+	5	1.1%
	453	100.0%

Economic Impact of Marine Activities on the Solent Economy

5.38 Full details of the economic impact assessment and the methodology used to measure the impacts are provided in Appendix 5. The following provides a summary of the key outputs. Figure 5.2 provides an overview of impacts.

Figure 5.2 – Summary of Solent Marine Sector Economic Impacts

5.39 Outputs from the economic impact model indicate that the total GDP attributable to final output demand for marine products and services in the economic study area amounts to between £3.4bn and £4.0bn, with a median of around £3.6bn.

5.40 Based on our estimates of total GDP of £20.2 billion for the economic study area, the marine sector accounts for approximately 17.8% of the economy. As highlighted earlier, it is important to reiterate that our estimates exclude the activities identified earlier in this Section. However, for the purposes of providing a complete picture of the total economic significance of all marine activities in the Solent area, indicative estimates have been provided later in this Section to account for the 'missing impact' of excluded activities.

5.41 Inclusion of these major activities would significantly increase the contribution of the marine sector to the economy of the economic study area. Indeed, the analysis has been cautious to eliminate the potential impact of large businesses in the economic study area in order not to over-estimate the sector's contribution to the economy. To this extent, the economic impact estimates should be considered as reasonably conservative which largely reflect the impact of marine based SMEs.

Gross Value Added (GVA)

5.42 In order to calculate the GVA contribution to the economy we have estimated the total gross profit of the marine sector and total spend on wages. These two

values combined provide a reasonable estimate of the marine sector's GVA contribution to the economy. Table 5.12 indicates that the GVA contribution to the economy of the marine sector equates to approximately £1.9bn. This is equivalent to approximately 20% of GVA within the economic study area. Again, it is important to highlight that this excludes the contribution of certain activities and facilities.

Table 5.12 – Weighted Breakdown of Marine Sector Turnover

Purchases (Supply Chain)	31.8%	£1,141,280,320
Wages	24.7%	£885,937,870
Rent & Other Overheads	13.9%	£497,994,300
Gross Profit	29.6%	£1,062,037,807
Gross Value Added (GVA)	54.3%	£1,947,975,677
Total Turnover (GDP)	100.0%	£3,587,250,297

Employment

5.42 Table 5.13 summarises the direct, indirect and induced employment effects of the marine sector operating in the economic study area. The total impact amounts to approximately 48,300 jobs of which 38,000 jobs are in the Solent area. This represents approximately 8% of total employment in the area – assuming a total employment of approximately 500,000. As already highlighted, this excludes employment at the naval base as well as that at Esso / Exxon – which employs approx 3,000 (which increases to around 5,000 with multiplier effects). The naval base has a total employment impact in the Solent area of approx 27,000 jobs (University of Portsmouth). Including these operations, total employment reliant on the marine sector (excluding tourism and cruise activity) would amount to approximately 70,000 or 14% of total employment (expressed in terms of both full and part-time jobs).

5.43 Importantly, the comparison between employment and GDP impact demonstrates that the marine sector is a relatively high value activity that should be harnessed as part of SEEDA's target strategy focusing on 'smart growth'. Moreover, the sample of marine businesses analysed as part of this study indicated that average turnover per worker in the sector amounted to approximately £125,000. This compares to the regional average in the South East of £48,000 per worker for all employment sectors (source: Eurostat / ABI, 2005).

5.44 Putting the marine economy into context, the 48,300 jobs supported by the sector in the economic study area alone is equivalent to nearly the number of jobs provided by the financial services sector in the area - approximately 17,300 jobs in the Solent Study are provided in the financial intermediation sector (see Table 5.7). Similarly, marine supported jobs are equivalent to around 95% of all people employed in the education sector within the economic study area.

Table 5.13 – Solent Marine Sector Employment Summary

	Solent Study Area	Other Areas	Total
Direct Employees	24,992	-	24,992
Indirect Employees	5,113	7,583	12,583
Induced Employees	8,237	2,502	10,739
Total Employees	38,342	10,085	48,314

Economic Impact of Excluded Activities

- 5.45 Before proceeding with the remainder of our findings, we have made an indicative estimate of the additional economic impact likely to arise from the key activities which have been excluded for methodological reasons (explained earlier in this Section). It is important to highlight that the following estimates should be treated as broad approximations only. No statistical significance can be attached to the figures and are intended only to provide a means for ascertaining the overall scale of the economic impact of all marine activities in the Solent area. As with all economic impact studies, the figures provided are estimates and should not be regarded as precise measurements.
- 5.46 It is important to highlight that the estimated additional impact of the excluded activities are based on information provided by previous studies (considered in Appendix 2) and data derived from the Annual Business Survey and Experian business database.
- 5.47 Our calculations indicate that the excluded activities are likely to account for approximately an additional direct 15,000 jobs which would take total direct employment to around 40,000. Applying the average employment multipliers summarised in Table A5.14, this would bring total number of jobs supported locally by the marine sector to around 61,000. Overall, the total number of jobs supported in the Solent and beyond its boundaries may amount to approximately 77,000.
- 5.48 Applying average turnover rates per employee, we estimate that the excluded activities would generate approximately an additional GDP of around £1.9 billion. This would imply a total marine related GDP of £5.5 billion. This represents approximately 27% of the total GDP of the Solent sub-region.
- 5.49 For methodological consistency, the other parts of this Section do not make estimates relating to the economic impact of the excluded activities.

Contribution to National Exchequer

5.50 In addition the contributions to GDP, GVA and employment, businesses and their employees within the economic study area will also contribute taxes and other contributions to central government. Table 5.14 summarises the analysis contained in Appendix 5 and shows that the marine sector contributes approximately £671.5 million annually to the national exchequer.

Table 5.14 – Total Contribution to National Exchequer

Income Tax	£256,915,598
National Insurance	£128,457,799
Corporation Tax	£286,158,861
Total Contribution	£671,532,258

Supply Chain

5.51 The business survey demonstrated that the marine sector supports a complex supply chain network. Indeed, particularly strong links were reported in respect of:

- Manufacturing components and products;
- Fuel;
- Wholesale retail goods; and
- Business and financial services.

5.52 Importantly, a significant proportion of suppliers and customers of the marine businesses are located within the economic study area: 41% and 48%. This highlights a well-established network of inter-dependent businesses. Moreover, this also demonstrates that local retention of economic value generated by the marine sector is relatively strong.

5.53 Based on the first round of supplier effects only, Table 5.15 provides an estimate of jobs supported in other sectors as a result of marine activities in the economic study area. This is shown to amount to around 9,600 jobs.

Table 5.15 – Types of Goods & Services Purchased (Weighted by Value)

Goods	Proportion of All Purchases	Implied Number of Indirect Jobs ¹
Manufactured Components & Products	21.6%	2,080
Fuel	9.3%	894
Wholesale Retail Goods	8.3%	798
Business or Professional Services	6.6%	633
Marina & Boatyard Services	5.9%	566
Commercial Port Services	4.5%	432
Logistics, Freight etc	3.8%	365
Financial & Insurance Services	3.0%	288
Retail - Other Goods & Services	2.4%	230
Marina Leisure Services	2.0%	192
Retail Services (High Street)	2.0%	192
Leisure & Tourism Services	1.5%	144
Other Transport Services	0.9%	86
Education & Research	0.8%	77
Construction Services	0.5%	48
Catering & Food	0.3%	29
Public Sector Services	0.2%	19
Other (not specified)	26.3%	2,525
Total	100.0%	9,596

¹ Based on our indirect employment projections

Interviews

- 5.54 In order to obtain a greater understanding of different marine activities a series of detailed face to face interviews were carried out with key individuals involved in marine activity within the study area. The purpose of the interviews was three fold. First, they enabled the consultant team to obtain a detailed understanding of the specific marine related activity the relevant individual was involved in. Second, it enabled the consultant team to understand the current issues facing the relevant marine activity. Third, it enabled the consultant team to understand what are the potential future trends likely to affect the relevant marine activity. The responses received in respect of the third purpose are reported in section 7 of this report.

Identification of Interviewees

5.55 In identifying those individuals to be interviewed the aim of the consultant team was to interview people across a broad spectrum of the marine activities within the study area, including not only those involved in the carrying out of specific activities but also those responsible for regulating marine activities.

5.56 A preliminary list of potential interviewees was produced by the consultant team and put before the Steering Group for comment and discussion. As a result the list was amended and the individuals identified approached. The majority of responses received were positive, although occasionally the opportunity to meet and discuss matters with the consultant team was declined. A list of the individuals interviewed, along with the date of their interview is provided in Table 5.16.

Table 5.16: Individuals interviewed

	Name	Organisation / Company Represented and general location	Date Interviewed
1.	Mr. Alan Inder	Hampshire County Council, Winchester	13/04/2007
2.	Mr. Mark Merritt	Formula Yacht Services, Lymington	01/06/2007
3.	Mr. Malcolm Hearnden	Hamble Yacht Services, Hamble	04/06/2007
4.	Ms. Barbara Thompson	Portsmouth City Council, Portsmouth	04/06/2007
5.	Mr. Mark Bookham	Wallenius Wilhelmsen Logistics, Port of Southampton	05/06/2007
6.	Mr. Alan Cole and Mr. Barry Robinson	Hampshire County Council, Winchester	08/06/2007
7.	Commodore David Steel	HM Naval Dockyard, Portsmouth	11/06/2007
8.	Mr. James Humphrys	Environment Agency, Colden Common, Winchester	14/06/2007
9.	Mr. Derek Smith	Southampton Container Terminals, Port of Southampton	20/06/2007
10.	Ms. Debbie Burns	Marina Developments Limited, Hamble	04/07/2007
11.	Mr. Ian Biles	Marine Services International, Gosport	04/07/2007
12.	Mr. Martin Putman	Portsmouth Commercial Port, Portsmouth	09/07/2007
13.	Mr. Jeff Walters	Southampton City Council, Southampton	12/07/2007
14.	Mr. Piers Wilson	Southampton Yacht Services, Southampton	12/07/2007

15.	Mr. Francis Paonessa	VT Portsmouth	17/07/2007
16.	Ms. Alison Kimber	Seaward Marine Limited, Cowes Isle of Wight	20/07/2007
17.	Mr. Bill Murphy	Isle of Wight Council, Newport	20/07/2007
18.	Mr. Chris Perry	Natural England, Lyndhurst	26/07/2007
19.	Mr. Peter Cusdin	SEEDA	23/10/07

Structure of the Interviews

5.57 There was no regimented structure to which the interviews were conducted, although the interviewers (who were all employees of Adams Hendry) attempted to make sure that throughout the interview they had obtained the information needed to address the threefold purposes of the interviews explained in paragraph 5.48 above.

5.58 The interviews did not run to a standard length. In some instances those being interviewed provided the interviewers with a detailed tour of their facility to show at first hand the activities they were involved in and some of the issues and problems which they run up against. These visits were particularly useful to the consultant team in understanding the range and extent of marine activity within the study area.

5.59 The consultant team would like to extend their thanks to those individuals above who gave their time to be interviewed.

Key requirements of the marine sector

5.60 The following section of the strategy summarises the key requirements of the marine businesses within the study area identified through both the business survey and the face to face interviews. The requirements identified through the business survey relate to marine activities and industries generally, where as those identified through the interviews are more specific to certain marine activities. Further details of the summary provided below are provided in Appendices 5 and 6.

5.61 In assessing the future requirements of marine businesses, it is important to examine the key reasons why these companies have located in the Solent waterfront study area in the first place. Indeed, when asked the major reasons for locating in this area, the majority (38%) identified being close to the waterfront as the key consideration. Similarly, 43% of businesses stated that being close to the waterfront was the main competitive factor of their current location. This highlights the importance of enabling a significant proportion of marine industries to carry out their operation on sites along and near to the Solent coastline. Indeed, the implication from the business survey is that, without the choice of near-waterside locations, a core determinant of business viability for many marine businesses would be removed. Consequently, in facilitating the diversification and natural growth of competitive marine industries in the Solent, it is critical that planning policies attach significant

weight to the protection of existing marine industry sites as well as the identification of sites in other suitable waterside and nearby locations.

Locational Requirements

- 5.62 Proximity to key clients and markets (28%) was also identified as a key competitive factor for locating in the Solent. This reflects the importance of inter-dependencies within the marine sector and a mature industry network that has become established in the Solent area. It also provides an indication of the importance of a number of large businesses at the end of the production chain (i.e. end-user producers) in supporting a complex supply chain of smaller companies which have clustered around these major players.
- 5.63 When asked what location specific issues were impacting on the operation of marine businesses in the Solent, key factors highlighted included: poor access (38%), expensive premises (35%), planning restrictions (33%), lack of parking (33%) and premises being too small (26%). These constraints highlight some of the factors that should be addressed and prioritised by planning, land-use and transportation policies for the Solent.

Land Use Requirements

- 5.64 Of those firms seeking to grow physically, the majority (43%) stated that they needed to relocate in order to accommodate their expansion need. Additionally, 25% were hoping to expand on their existing sites whilst 17% were intending to upgrade their existing premises.
- 5.65 A significant proportion of respondents (20%) identified having appropriate types of premises as a key reason for operating from their current location whilst 17% also highlighted affordable premises as being important. These factors are likely to reflect the specific physical requirements of many marine related businesses, particularly in the manufacturing sector. Indeed, it is reasonable to suggest that, in many cases, the issue of premises type is likely to be closely related to the need to be close to the waterfront.
- 5.66 Of businesses which stated that they recently tried to relocate, the majority (33%) highlighted that they were seeking a site within the locality. This reinforces the desire of businesses to remain part of the network of marine businesses established in the Solent.

Skill / Labour Requirements

- 5.67 Over one third (36%) of businesses surveyed highlighted that they currently are experiencing a shortage of skills. The incidence of skill shortages was most keenly felt within the boatbuilding sector where nearly 50% of firms highlighted having problems with suitable workforce supply.
- 5.68 In terms of the type of skills shortages being experienced, over 57% of marine companies identified engineering skills as being significantly short in supply. Other key shortages identified included administration and managerial skills (20.1%), design (8.6%) and specific boat manufacturing skills (8.6%).

- 5.69 The majority of marine companies surveyed (58%) stated their intention to invest and expand over the next 5 years. Of those planning to expand, over 60% highlighted that this would be in the form of workforce growth. Expansion in terms of capital equipment and land and property investment was highlighted by 32% and 30% of firms respectively.
- 5.70 Key workforce requirements identified by marine businesses related particularly to the need for more engineers and other key manufacturing skills.
- 5.71 Consequently, in facilitating the diversification and natural growth of competitive marine industries in the Solent, it is critical that planning policies attach significant weight to the protection of existing marine industry sites as well as the identification of sites in other suitable waterside and nearby locations. In the development of new employment-related planning strategies, it is important that policies are suitably robust to meet the site requirements of an increasingly diverse and specialised manufacturing sector. Tarring all manufacturing activities with the same brush is likely to result in the exclusion of key, competitive businesses from the planning process.

Case Studies

- 5.72 In order to more fully outline the range and importance of marine activities occurring with the Solent Waterfront and their possible future requirements the consultant team have identified three case study examples of different marine activities.

CASE STUDY 1: WALLENIUS WILHELMSSEN LOGISTICS, SOUTHAMPTON

Wallenius Wilhelmsen Logistics (“WWL”) is a leading independent shipping company and global provider of vehicle logistic services, with Head Offices based in Oslo and Stockholm. WWL offers a comprehensive range of services including supply chain management, ocean transportation, inland distribution and technical services, tailored to the specific business requirements of its customers.

In total WWL transport around 3.3 million units each year; 1.7 million by sea and 1.6 million inland. They service around 1.65 million and 47,000 rolling equipment units annually. There are on average 60 to 65 vessels in WWL fleet at any one time providing regular connections between 1800 destinations on a regular basis. WWL employ around 3200 people worldwide. In addition a Ship Management Company named Wilhelmsen Car Carriers has been established in Southampton to take advantage of the Government’s Tonnage Tax scheme and several vessels are now registered directly in Southampton.

WWL have offices throughout the world. Their main UK base is a 48 hectare site located within the Eastern Docks in the Port of Southampton. Known as the International Vehicle Terminal the facility was the first multi-storey vehicle export facility within the UK when it opened in May 2002. The terminal features the latest car handling safety mechanisms and computer technologies which provide instant electronic data interchange to the major car manufacturers. The five storey facility

and surrounding storage land are used to handle export motor vehicles produced within the UK by companies such as BMW Mini, Honda, Jaguar, Land Rover, Toyota, Rolls Royce as well as other vehicles and machinery produced by Caterpillar, JCB

and New Holland. The Terminal is predominantly used for the export of vehicles but also handles small amounts of imported vehicles. In 2006 Wallenius Wilhelmsen handled a total of 220,000 vehicles.

Soon after the merger of the two companies Wallenius Lines and Wilhelmsen Lines in the late 1990's the newly formed company undertook a strategic review of its operations to determine where their main hub facility in the United Kingdom should be based. The Port of Southampton was chosen for a number of reasons, but fundamentally WWL concluded that the Port of Southampton was geographically the right place for its operation to be based, offering un-restricted berthing access for the vessel calls. The reasons for this decision related to Southampton's position at the base of the spine of the country, the proximity of good road and rail connections to its inland markets and close proximity to the main shipping lines. Compared to other potential UK locations a facility in Southampton has considerable associated cost savings. Also a stabilised and harmonious labour force and relatively high skill levels contributed to this decision.

Located within the Eastern Dock Estate at the Port the terminal receives vehicles directly from factories via either road or rail for onward distribution world wide, with vehicles stored in the terminal for the minimum time possible, at most a few days. In recent weeks the new Hitachi Javelin rail carriages for deployment onto the St. Pancras – Ashford high speed link have come into the Port. These will later be used for service to the 2012 Olympics in London.

Through their terminal and commercial operations in the Port WWL employ around 130 people directly, with employees given the necessary training and development 'in house'. Labour is not sub-contracted as this does not provide the flexibility and efficiency needed to serve the needs of vessels or customers as and when required. WWL suppliers and main customers are global companies although there are a number of UK based companies, with some situated locally in the Southampton area.

The main issue considered by WWL as likely to affect the future development of their business at Southampton is space. Storage land within the Dock estate at Southampton is at a premium which has led to innovative ways, such as multi storage car parks, in which cargo is stored and handled. In addition to this the failure of the Dibden Bay proposal and a general lack of land outside the Dock estate, but within close proximity, is also a hindrance to the development of future operations, particularly for longer term storage of imported cars which are currently routed via Portbury Dock in Bristol. If land were available in close proximity it would be possible, for example, for WWL to carry out more extensive pre-delivery inspection tasks, which would not only benefit customers and WWL but also have wider environmental benefits in reducing the distance over which vehicles are transported before reaching their final destinations. In addition it would reduce the costly need for WWL vessels to deviate to Bristol and allow consolidation of all operations in the Southampton area.

CASE STUDY 2: HAMBLE YACHT SERVICES, PORT HAMBLE

Hamble Yacht Services (HYS) are a yacht repair and refit facility providing professional services for yachts, cruising, racing and motorboats. They occupy an approximately 2.8 hectares site on the River Hamble within the settlement of Hamble itself.

HYS have effectively developed a 'one stop shop marine cluster' for yacht building, repair and refitting on the site by sub letting parts of the site to other marine related companies. Along with these other companies HYS provide a broad range of skills on site that includes boat carpentry, joinery, fibreglass, gel-coat, painting, rigging, mechanical and electrical engineering and fabrication. The site also provides modern secure storage facilities and tender charter. In addition to the wide range of on site services, crews are provided with office infrastructure, accommodation and catering services.

HYS itself has an annual turnover of around £5million and has a core staff of 50 employees. Sub-contracted labour is also utilised as and when required. These staff are highly skilled in the work they undertake. In total HYS and its tenants employ approximately 220 people on the site who overall generate an annual turnover of approximately £16.5 million.

Based on the River Hamble, within easy reach of Southampton Water and the Solent HYS consider themselves to be within Europe's Yachting "Mecca", Even though Cowes on the Isle of Wight has historically been the focal point for sailing in the local area, the restrictions on the distance boats can navigate along the Medina River has made it more attractive for recreation vessels such as yachts as well as associated activities to find locations such as along the Hamble that do not have these restrictions. HYS is based on the Hamble because it is both close to other marine related activity on the Isle of Wight and the mainland around the Solent, has a reputation as the site for marine related recreation activity and is accessible to the rest of the country through nearby rail and road connections.

The major issues which HYS consider they face in seeking to continue their activities include:

- i. Existing strict planning and environmental restrictions and the possibility of such restrictions becoming tighter and more restrictive in the future;
- ii. Linked to these restrictions is the fact that planning policies and environmental legislation fails to adequately recognise the importance of marine activities such as those undertaken by HYS;
- iii. A lack of land for expansion, both in terms of their existing site and the availability of other such suitable marine sites within the area. Linked to this is the pressure to develop marine sites for other more economically attractive uses such as housing, with such uses gaining impetus through recent political statements;

- iv. A general perception that there is a lack of political will at all levels to develop the marine sector;
- v. A lack of skilled labour to carry out the tasks required.

In respect of their future prospects HYS considers that the international side of their business will grow as a result of the 2012 London Olympics. Although none of the Olympic events will be occurring in the Solent area it is considered that benefits will be forthcoming. Whilst HYS plan to improve their facilities to attract customers there is concern regarding long-term employment prospects due to the lack of infrastructure or establishments for training a suitable labour force. Lack of political support to encourage the marine sector is a concern that could lead to the disappearance of the marine sector from the Solent region in another 10 to 15 years if nothing concrete or positive is done now.

CASE STUDY 3: FORMULA YACHT SPARS LIMITED, LYMINGTON

Formula Yacht Spars Limited is the UK's largest producer of performance carbon and aluminium yacht spars, supplying products to racing, quality cruising and Superyachts around the world. They have been based in Lymington for the past 7 years. In late 2004 they acquired Essex based Hood Yacht Spars Ltd to increase their range of products and presently work from Burnham in Essex, Montpellier in France and Blokzijl in Holland in addition to Lymington.

FYS manufacture spars, spinnaker poles, furling mast/boom, light weight composite structures and provide a wide range of services which include design, project management, rigging, repairs and servicing. FYS employ 24 in their factory at Lymington and another 12 as administrative staff. The staff have been split across two sites in Lymington. 80% of Formula Group's products are exported and they envisage that this proportion could easily increase if positive steps were taken by policy makers to improve the marine sector in the region.

Their premises in Lymington do not have access to the water, the distribution of products is carried out by road transport, often to the Port of Southampton where they are placed on vessels for onward distribution. The area around their premises has changed drastically over the years with a number of marine businesses located in the area having closed due to spiralling land prices from the pressure from residential development. FYS are now surrounded by predominantly residential use.

The group however, wishes to stay in the Solent region, due to the locational advantages of proximity to major road and rail routes, the Port of Southampton, skilled labour and to the economic hub of the country i.e. London and the surrounding region. The company plans to shift to the former RAF Hythe site, which has direct access to water and is also closer to the Port of Southampton.

According to FYS, the key problems facing marine industry are high land and labour costs; improper functioning of the planning and land system; difficulty faced by stakeholders in accessing information on alternatives and lack of initiative to develop marine industries.

The 2012 London Olympics are envisaged to bring in more business and customers to the area in general and is expected to be positive for the growth of marine industries. FYS consider that all stakeholders with the potential to influence the future of marine industries in the Solent area need to be identified and then provided with information on the importance and ongoing success of marine industries in these areas. A number of large companies are planning to shift to the Solent, opportunities need to be explored to link the larger companies with the small and medium firms to help them both work efficiently and productively.



6. Significant Marine Sector Sites

6. SIGNIFICANT MARINE SECTOR SITES

- 6.1 It is desirable to identify the strategic locations and sites used by marine industries or sites of strategic potential so that their significance can be recognised in the process of strategic planning and as a basis for monitoring the needs of marine industries. A list was drawn up of sites which are especially suited to the needs of marine activities, whose loss would, in our view have implications at, at least, sub regional level.
- 6.2 A preliminary list of sites was drawn up by systematically working along the coastline of the study area and identifying all sites that are in use, or have the potential to be used for marine industry purposes. The list was kept under constant review as the study progressed. Adjustments were made as more information and consultation was undertaken, on advice from the steering group and also following comments made by and discussions with members of the marine industry who attended the briefing session on 27 April. This process resulted in the identification of 25 sites considered to be of either existing or potential strategic economic significance (Table 6.1). It is important to emphasise that these are only the most important sites and the implication emphatically should not be drawn that those not listed are dispensable. It is also expected that marine activity over time will change and evolve, and the list of sites considered of strategic importance today may be different in the future.

Table 6.1: Marine sector sites of strategic economic significance

Site No.	Site Name
1.	Lymington River up to the B3054 road bridge
2.	Calshot Spit
3.	Fawley Marine Terminal, Refinery and Petrochemical Complex
4.	RAF Hythe
5.	Dibden Reclaim
6.	Marchwood Seamounting Centre to Marchwood Wharf
7.	Port of Southampton – port operational land from Redbridge to the boundary with Ocean Village on the Itchen (excluding Royal Pier/Town Quay/Mayflower Park but including the Oceanography Centre).
8.	Royal Pier/Town Quay/Mayflower Park
9.	Ocean Village
10.	Itchen Wharves (east and west bank)
11.	Hamble Oil Terminal and Jetty
12.	River Hamble
13.	HMS Daedalus
14.	Gosport – Haslar to Priddy's Hard
15.	Gosport – RNAD Frater/Bedenham
16.	Fleetlands
17.	Port Solent
18.	Horsea
19.	Whale Island
20.	Portsmouth Commercial Port
21.	HM Naval Base and Dockyard
22.	Chichester Marina
23.	Ryde Pier
24.	Cowes – River Medina, both banks as far as Newport
25.	Yarmouth

- 6.3 For each site, detailed boundaries were defined on an Ordnance base and a compatible system used for collecting, storing and displaying data.
- 6.4 The detailed boundary of each site was drawn up using the knowledge available within the consultant team, information obtained from site visits and from a desk based study (such as the relevant development plan proposals map). As the majority of the strategic sites are located adjacent to the water an administrative decision was taken to draw the seaward boundary of the site at mean high water mark, the boundary of harbour authorities' jurisdiction. However, it should be clearly understood that in most cases the strategic significance of the sites does not end at this point and relies on the marine connection. Similarly it should be understood that the boundaries drawn for the sites represent the views of the consultant team on the information available to them. The consultant team well understand that drawing a boundary immediately generates different implications for the area within the boundary and the area outside the boundary. The boundaries have been drawn by the consultant team on the basis of the information available to them. There may well be parcels of land outside of the boundaries drawn related to these sites which are of importance to marine industries. These areas should not be ignored in any future analysis simply because they do not fall within the boundary drawn by the consultant team. Plans showing the boundaries of each of the strategic sites along with the key environmental designations are reproduced at Appendix 8.
- 6.5 A database was designed to enable information collected for each site to be stored and displayed. Data for each site was obtained in accordance with a specification set out in a proforma. An initial draft proforma was designed and then subjected to discussion and analysis through the steering group meetings before it was finalised. A blank proforma is reproduced at Appendix 7. The information recorded on the proforma for each site covers:
1. *Background information on the site.*
Information such as its name, address, location, size, local authority area in which it is located and a brief description of the site.
 2. *Key marine activities taking place within the site.*
Marine activities on the site are placed into general categories which are provided in detail at Appendix 7. The marine activity categories are based upon the marine sector definition produced by Marine South East as amended, which is discussed above in section 4.

It should be noted that the information provided in the proforma does not attempt to record each and every individual marine use occurring on the identified site, but rather sets out what are considered to be the key marine activities only. These key activities were determined through first hand knowledge of the sites, examination of existing information produced on the sites and site visits.
 3. *Accessibility of the site in terms of road, rail and water.*
For road access each site was categorised in respect of its existing or possible accessibility to the different categories of road as defined or equivalent to those defined in the Hampshire County Structure Plan

Review. The different categories of road are identified as the National Primary Route Network, the Strategic Road Network and other road networks.

For rail access it was simply noted whether the site had existing rail access, possible rail access or no existing or possible rail access. For marine access the maximum depth of water to any part of the site as indicated on the Admiralty Chart was noted.

4. *The existing or potential economic significance of the site.*
Although all these sites are considered to be of existing or potential economic importance, the proforma includes an indication of their relative strategic significance using the following simple three point scale:

- i. of national significance, i.e. a significance beyond the regional level;
- ii. of regional significance, i.e. a significance beyond the local level; and
- iii. of local significance.

The sites were also categorised as either of existing or potential significance.

The categorisation was based on the judgement of the consultant team taking into account the information obtained for the relevant site and the information the consultant team obtained during their examination of the existing marine activity baseline position outlined above in Section 4.

5. *The relevant adopted development plan for the site and the relevant key development plan designations and policies.*

As for other entries the proforma does not attempt to provide a complete analysis of every development plan policy relevant to each site and their implications. For some sites this would require an extensive essay following a detailed land use planning policy context analysis, something which could not be done during the time of this study. Rather the information provided in the proforma aims to summarise the key designations or policies applicable to the site.

6. *The key environmental designations covering part or all of the site.*
Once again the information in the proforma aims to provide an indication of the key environmental designations. The information on environmental designations was obtained from the relevant adopted development plan, the relevant local authority or from information produced by Natural England or the Environment Agency.

7. *The key environmental designations covering the area between the mean low and mean high water mark.*

This information was included to address the issue discussed above of the site boundaries not extending to the mean low water mark, but at the same time gives an indication of the environmental constraints likely to affect strategic sites. These designations were also obtained from the

relevant adopted development plan, the relevant local authority or information produced by Natural England or the Environment Agency.

8. *An indication of the constraints, strengths, threats and opportunities to future operations and prospects at the site.*

- 6.6 The information collected for each site is thus partly factual and partly judgement, drawing on the knowledge within the consultant team and supplemented by views of others with specific expert knowledge of the site in question. Completed proformas for each of the sites are provided at Appendix 7.

Summary of findings on strategic sites

- 6.7 Within this section of the report a summary of the information contained in the relevant site proforma is provided.

Location and size of strategic sites

- 6.8 Figure 6.1 provides an overview of the location of the strategic sites in the study area. Whilst they are generally well spread throughout the study area there are two main clusters. The first cluster consists of sites 2 to 12 which are all located alongside the Southampton Water / River Test / River Itchen / River Hamble are part of the study area. The second cluster consists of sites 14 to 21 and are found in Portsmouth Harbour. Both the Port of Southampton and Portsmouth Naval Base are served by deep-water channels which are effectively elements of national economic and defence infrastructure respectively.
- 6.9 The size of the defined strategic sites varies depending, in general terms, on the type of activity taking place within them. As a rough rule of thumb the significant sites in existing commercial port use are larger than those in leisure or manufacturing use. This reflects the scale of modern cargo operations and the fact that ports are much more than locations where cargo is loaded or unloaded from vessels. There are significant elements of storage, distribution, logistics, administration and cargo preparation activities within sites identified for commercial port operations which all have a demand for land adjacent or close to where the cargo is loaded or unloaded.

Key marine activities

- 6.10 Analysis of the activities occurring on the sites indicates that several accommodate a wide spectrum of marine activities. In the majority of instances it is clear what is the key marine activity taking place on the site. However, this is not universally so. For example site 2, Calshot Spit, is identified partly because it also houses the radar facilities used by the Southampton Vessel Traffic Services to control navigation.
- 6.11 Most of the sites are intensively used and several have very little if any spare space available. This obviously raises an important issue that is discussed further later.

- 6.12 Time and resources constraints meant that it was not possible to analyse in great detail the marine uses taking place within the strategic sites. Four case studies were selected for more detailed consideration. These are described in Section 5 above and consist of: Wallenius Wilhemsen Logistics, who are located within strategic site 7; Hamble Yacht Services, who are located within strategic site 12; and Formula Yacht Spars, who are located within strategic site 1. Figure 6.5 indicates some of the major marine businesses that operate from some of the strategic sites.

Accessibility

- 6.13 Accessibility for the different strategic sites also varies. In respect of road access the sites considered, at a general level, to have the most advantageous existing or potential connections are sites 3 to 8 and sites 17 to 21. Clearly the site with the most advantageous rail connection is the Port of Southampton which benefits, through various rail freight terminals, from direct connections into the main line through Southampton. Similarly the Port of Southampton benefits from the most advantageous marine access, served as it is by the 12.6 metre deep channel and providing alongside berth depths of up to 15 metres. The form in which marine access is provided is also important. It is generally considered that a quay or slipway with direct access to a reasonable depth of water supported by area of land ashore is generally of more benefit than access via a series of jetties or piers.
- 6.14 That having been said, it is impossible to generalise because various marine activities have different needs. Merely because a site does not have access to deep water, the rail network or the national primary road network does not, of course, mean that its accessibility is poor in relation to the type of marine use it supports. Nonetheless, we think that adequate access is such a critical concern for many marine industries (and lack of it can make a good site unusable) that the effort required to identify each site's needs would be repaid by ensuring that where they are already met they can be protected from incursion by other development and where that is not the case, the need for improvements can be properly assessed and fed into the transport planning process.

Key development plan designations and policies and environmental designations

- 6.15 An overview of the approach taken in policy documents to marina activities along the Solent Waterfront is provided in Section 3. The information in the proformas seeks to identify the key site-specific policies and requirements for the strategic sites.
- 6.16 The strategic sites are located within the boundaries of several local authorities, and are therefore subject to different policies and policy approaches. Across the study area there are slight variations in the way the relevant development plans deal with common issues. Where policies recognise and support the retention of marine activities on a strategic site, this is generally limited to the current activities and site boundaries.

- 6.17 The coastal zone is heavily designated for its perceived environmental and cultural significance. Policies in favour of these considerations are dominant in development plans and frequently re-appear as conditions or caveats to otherwise supportive policies. National and international designations are backed by Government policy statements and legislation and are therefore critical to an analysis of the true potential, or lack of it, for development of strategic sites. This is a key consideration in formulating any conclusions about the viability of sites for marine industries. An inability to comply with requirements for mitigation or compensation without policy support identifying the overriding need for marine industry would be fatal to the prospects of development proposals on such sites.
- 6.18 The foreshore areas surrounding the strategic sites are generally heavily protected for their nature conservation importance. Any conflict between marine activities and their environment is often not as a result of what takes place on the land, but the connection between the land and the water. Figures 6.2, 6.3 and 6.4 show the locations of various environmental designated areas in relation to the strategic sites.

Existing or potential national economic significance

- 6.19 The sites which are considered to be (or potentially could be) of national economic significance are listed below, in geographical order from west to east.

Site 1 Lymington River – Recognised worldwide as a marine leisure location; the areas identified on the Lymington River also contain other marine related activities that are of some significance, i.e. manufacturing and boat building.

Site 3 Fawley Marine Terminal, Refinery and Petrochemical complex – The largest refinery in the UK and one of the largest in Europe this facility relies on deep water access in Southampton Water and is clearly of national significance.

Sites 5 and 7 The Port of Southampton and the Dibden Reclaim – The importance of the Port of Southampton has already been outlined. This facility is an international deep sea gateway into the UK and clearly of national significance. Dibden Reclaim remains identified in the development plan, subject to the satisfaction of criteria relating to infrastructure and the environment, as the strategic expansion land for the Port and is a site of potential national significance.

Site 6 Marchwood Seamounting Centre to Marchwood Wharf – This site is already of national significance due to the presence of Marchwood Seamounting Centre. However, its proximity to the deep water channel and to the existing Dock and its landward transport connections means that it also potentially a development opportunity for marine uses of national significance.

Site 11 Hamble Oil Terminal and Jetty – This fuel storage and distribution depot is considered to be of national significance.

Site 12 River Hamble – This is a yachting and boating haven of international renown. In addition to its 3000 plus moorings it contains a significant boatbuilding and repair activities as well as being a recognised base for national and international yachtsman. For the marine leisure industry, this site is clearly of national economic significance.

Sites 15, 16, 18, 19 and 21 Various MoD and Naval sites in Portsmouth Harbour – Collectively these sites are clearly of national economic significance, serving the MoD uses in Portsmouth. Recent studies have identified that overall the presence of the navy, the MoD and primary civilian contractors in the region as a whole (of which the Portsmouth Base is the core) is responsible for a total of 38,000 jobs and more than 5% of regional Gross Domestic Product (GDP).

Site 24 River Medina / Cowes – The River Medina is one of the busiest in the country for recreational sailing and boating. It has an international reputation for these activities, most clearly demonstrated during the International Cowes Week sailing regatta held during August every year. In addition to marine leisure and recreation and related activities the site is also significant in that it is the main transport interchange with the main land in terms of both passengers and freight.

Existing or potential regional significance

- 6.20 The following sites are considered to be of existing or potential regional economic significance.

Site 4 RAF Hythe – This former military port facility has existing landside and marine infrastructure and is being put to marine industrial use by SEEDA. It has limitations and is not suitable for those uses requiring large areas or a high standard of access. Access to deep water is via jetties and pontoons and therefore of limited use to certain marine activities (i.e. those that require launching facilities through slipways or an alongside quay). However the site has the potential to accommodate a significant amount of marine activity.

Site 8 Royal Pier / Town Quay / Mayflower Park - This site should be considered of regional significance because it hosts the boat show, an activity and event with significance arguably beyond the regional level, and key ferry services to the Isle of Wight.

Site 10 River Itchen – This is a collection of a number of individual sites used by the marine leisure and ports (mainly sea-won aggregates) industries, which together is of regional significance.

Site 13 HMS Daedalus – We have included this large site, partly owned by SEEDA, for its regional potential. It is the only sizeable near-coastal site on which marine industries could be accommodated with room to expand. For it to fulfil its potential, access to the shore and to the Solent would need to be improved.

Site 14 Haslar to Priddy's Hard – This site contains a mix of land uses and activities and has a long history of marine activity, defence and employment

uses. The prominent marine use is that found within the Gosport and Haslar Marinas. The significance of this site is considered to be greater than the local level. We have included this site as much for its potential intensification for marine uses

Site 17 Port Solent, and Site 22, Chichester Marina – These are the two largest marinas in Portsmouth and Chichester Harbours respectively. They have been included as of regional significance to underline the significance of the marine leisure industry in these harbours.

Site 20 Portsmouth Commercial Port – A key passenger gateway for Western Channel routes and a significant commercial port, although small in comparison with Southampton.

Existing or potential local significance

- 6.21 The remaining strategic sites are considered to be of existing or potential local economic significance.

Site 2 Calshot – Contains important marine leisure activities in the form of watersports, training facilities, boat storage as well as safety and navigation equipment.

Site 9 Ocean Village – This site has in the past been the base for events of national or international renown, be arguably of regional importance and may be used again. However, the main function of this site appears to be shifting towards an area of publicly accessible waterfront for the local community.

Site 23 Ryde and Site 25 Yarmouth – Both are key ferry ports but neither have a large supporting base of marine industries.

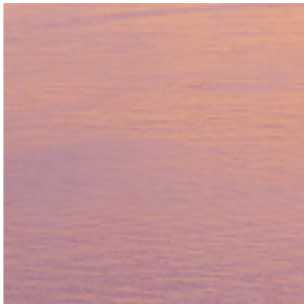
Strengths, Constraints, Threats and Opportunities

- 6.22 Whilst each site has its own strengths, constraints, threats and opportunities a number of general trends emerge from the analysis of the sites. Similar points arose through the business survey and face -to-face interviews.
- 6.23 The key strength to emerge is that there is significant evidence that most respondents continue to regard the Solent as one of if not the premier location for marine industries in the UK. There is also general agreement that these sites accommodate sector-leading activities and facilities across the full range of the marine industries, albeit that a number were operating in less than ideal conditions, in dated premises and inadequate sites, when their competitors elsewhere in the UK or abroad had taken a more radical approach to modernisation and were able to operate more efficiently and with fewer restrictions on expansion. Most respondents cite the difficulties in gaining planning consent and the high price of land as the principal difficulties followed by the increasing problems of manufacturing close to residential areas.
- 6.24 The analysis confirms that there are a number of significant constraints to the ongoing and future use of several significant marine industry sites. One of the main identified constraints results from the necessary geographical location of

these sites in the coastal zone, an area highly protected for its nature conservation and ecological importance. The potential conflict between present, and more significantly, future operations and activities at these sites within areas of nature conservation importance is a key constraint

- 6.25 Juxtaposition to incompatible land uses is also a constraint on several sites. From the business surveys and face to face interviews there is anecdotal evidence that this problem is not recognised in local development plans or documents and policies, is increasing and is likely to grow as pressure for residential development increases and environmental expectations and enforceable standards rise. In several cases respondents foresaw a scenario in which they could no longer operate, at least as they were currently doing.
- 6.26 The fact that few sites have little room for businesses to grow and several are already operating at or near their physical capacity is a key observation. In some instances this has led to innovative ways to expand, but these are palliative measures that cannot disguise the fact that a number of marine industries are not performing to their potential because the opportunities to expand either do not exist or are unaffordable. The case study examples of businesses outlined above in section 4 provide examples. Wallenius Wilhelmsen, who even though in collaboration with the port owners ABP have developed the first multi storey vehicles storage facilities in the UK, would still like additional land within the Port of Southampton or close by to expand and develop their existing operations. Formula Yacht Spars have had to carry out their operations on a split site in Lymington due to the inability to find one site of sufficient size, now hopefully resolved by a proposed move to the SEEDA site at Hythe.
- 6.27 Thus the value of the overall strength of the Solent as a base for marine industries (location, reputation and physical characteristics) is severely curtailed (for the Ports and marine leisure sectors particularly) by limited scope for expansion. The principal threat must therefore be that if it is not possible to expand in the Solent, key industries will either leave or adapt their presence here to the constraints. For the ports sector that could mean wholesale departures from Southampton if the Port cannot provide the land and infrastructure and if capacity becomes available elsewhere. For the marine leisure sector, the scenario is that manufacturing becomes increasingly unviable in the Solent, which becomes, effectively, merely a 'shop-window' for manufacturing elsewhere in the world.
- 6.28 There are a number of other general threats to key sites, including the advent of a new system of marine planning, the stated purpose of which does not appear to include assistance to marine industries. We take up a number of these points in our conclusions.
- 6.29 With few exceptions, it is impossible to avoid the conclusion that the main areas of 'opportunity' on most of these sites are in fact responses to constraints on expansion. It is difficult not to admire the ingenuity with which enterprises are adapting and reusing marine infrastructure that was, in some cases new more than a century or more ago, some of it now listed for its historical importance. However, the inescapable fact is that it is rarely possible for marine industries to operate as efficiently in such circumstances

as on a recent site, which most of their competitors already possess. It is easily possible to foresee the conditions for a spiral of decline that has previously affected UK industries in similar circumstances.



7. Future Trends

7. FUTURE TRENDS

- 7.1 In common with many other sectors, the maritime industry sector is affected by trends in international as well as domestic environments in regulation, technology, markets, labour supply and political contexts. The majority of the consequences for the industry come from economic and fiscal measures, including the strategic capabilities of national interests in the maritime sector (factors include the weakness of US dollar and key players in pursuit of a strategy of acquisition and consolidation).
- 7.2 Key trends relate to world trade and the growth of both developed and developing countries. The health of major economies such as that of the USA provide important demand stimuli for world trade and hence affect the prospects for shipping of commodities, both oil and non-oil. A steady growth of world gross product and the increasing price of oil, have supported investment in the ports and shipping sector, and consequently in the industries supporting it, such as shipbuilding. It is argued that monetary changes could have a significant impact on global imports and exports. For example a depreciation of the dollar would imminently cause a fall in the demand for imports, triggering a domino effect across the world. Rising oil prices could offset a number of consequences, such as the increase in prices of commodities being shipped.
- 7.3 In practice, in an increasingly integrated global economy, trading trends may be less easily disturbed. In a report by the United Nations 'World economic situation and prospects 2007', the deepening of global economic integration is highlighted by the fact that 'growth of world exports is more than twice that of world output'. It would take a great effort for countries to become self-sufficient, and long-term changes in the monetary sector of developed countries to affect investment that could concurrently damage the shipping sector.
- 7.4 Although fiscal measures are very important, other factors could also have an effect on marine industries. Regulatory controls and domestic support given to the sector is often crucial to maintaining a competitive position in a global market. Investment in R&D, training and the promotion of strong supply chains (clusters of activities) provide a solid basis for growth. Furthermore, environmental concerns will eventually affect tourism patterns and will also impose limitations on the fishing sector.
- 7.5 Although Europe and indeed the UK have enjoyed a big share of the global market, the increasing appearance of other markets, especially from the Far East, has posed a number of challenges.
- 7.6 Since the 1980s, the UK marine industry has benefited from the competitive advantage of low regulation and taxation, following the economic decline of the 1960s and 1970s. However, the competitive position has been gradually lost and the industry needs to develop a niche market through continual innovation.

Ports and shipping

- 7.7 The greater part of exports worldwide, around 90%, by volume, is transported by sea. For the EU as a trading block, 90% of the EU's external and 43% of its internal trade is shipped. The proportion is higher in the UK, an island nation, at about 95%. With a fast growing global trade (9% growth rate in 2005, compared to 5% in 2003 (OECD workshop on maritime transport) and 3.5% in 2002, and expected to slow down in 2007 at 7% - Boom and Bust at Sea, The Economist 2005) - much of which is down to China's rapid economic expansion and its integration to the global economy - investment in shipping has boomed. Although they are expected to maintain positive, shipping rates will depend on the industrial development in Asia (China, India and South Korea), Russia and the US, import and export growth in the US and Europe as well as the price of oil.
- 7.8 In 2003 European ports handled 60 million TEU (Twenty-foot Equivalent Units), 10.5% up from 2002, with an increasing trend recorded in 2004 in major ports (OECD workshop on maritime transport). At a workshop on maritime transport, organised by the Organisation for Economic Cooperation and Development, concerns were expressed on whether European container terminals can adjust to the continuing increases in container volumes.
- 7.9 Freight traffic at UK ports rose by 2% (by 5 million tonnes to 586 million tonnes) in 2005 compared to 2004. Total inward traffic was 354.4 million tonnes, while outward traffic was 231.3 million tonnes (DTI, Maritime Statistics, 2005). The official statistics are summarised in Table 7.1.
- 7.10 Cruise shipping is a major source of inbound tourism for European countries and consequently has a major impact on jobs. According to the "European Cruise Contribution" report, around 2.6 million passengers started their cruises from European ports in 2005 (90% were European nationals), generating 13 million passenger visits to European ports. Over the period between 1995 and 2005 demand for cruising went from 1 million to 3.3 million passengers, with an estimated 480 million euros paid in commission to European travel agents. This growth is expected to continue. Southampton is now the largest cruise port in northern Europe, as a point of departure rather than as a destination.
- 7.11 The sector is also responsible for more than 180,000 jobs, while an estimated 3.1 billion euros was spend on cruise ship construction and maintenance, both across Europe.

Port Activity Trends

- 7.12 One of the key issues that arose from the Solent Waterfront Workshop in July 2007 related to the future of port activities in the Solent area. In this section we review general trends in port activity throughout the UK and seek to analyse the implications of this for the ports within the Solent area. Inevitably because of its greater commercial significance the analysis concentrates more on the implications for the Port of Southampton.

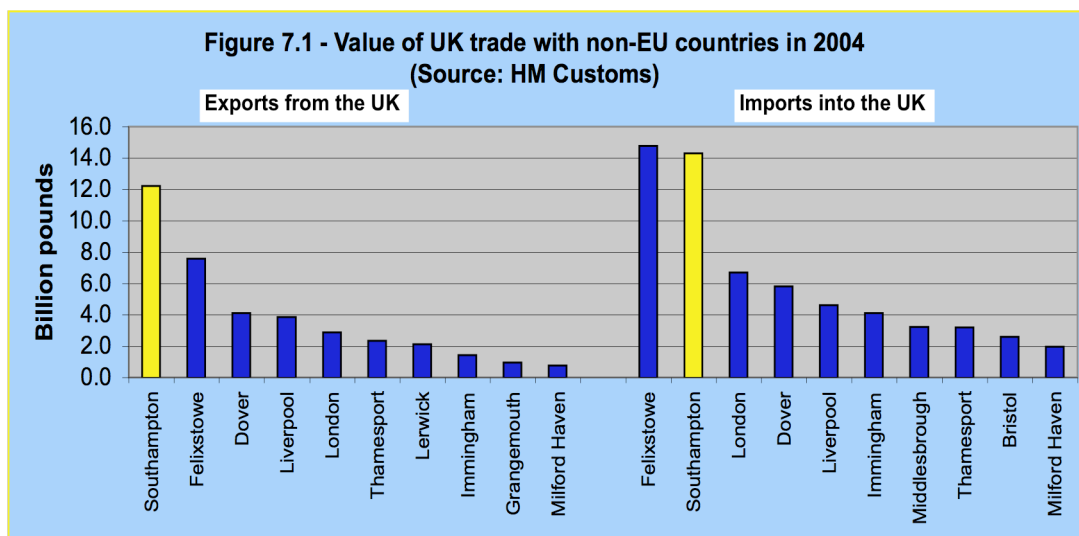
7.13 Whilst Portsmouth has one of the leading ferry passenger terminals in the UK and one of the most significant naval bases, Southampton is one of the leading cargo distributors in the UK. Of the 51 major ports in the UK, Southampton is ranked as the fourth largest in terms cargo traffic by volume, behind Grimsby & Immingham, Tees & Hartlepool and London (see Table 7.1).

Table 7.1 – Freight traffic at UK ports

	Inward		Outward		Total	
	Number in tonnes	% of total UK	Number in tonnes	% of total UK	Number in tonnes	% of total UK
Grimsby & Immingham	43.7	12.3	17	7.3	60.7	10.4
Tees and Hartlepool	19.9	5.6	35.9	15.5	55.8	9.5
London	45	12.7	8.9	3.8	53.8	9.2
Southampton	25.4	7.2	14.6	6.3	39.9	6.8
Milford	21.3	6	16.3	7	37.5	6.4
Total UK	354.4	100	231.3	100	585.7	100

Source: DTI, Maritime Statistics, 2005

7.14 These statistics have limitations and pitfalls for researchers. They use tonnage as the measure, when value is nowadays a more relevant criterion of national significance. The top two ports in the official table all deal in bulks, such as coal or ores, of high weight but relatively low unit value. Analysis by ABP of Customs data for 2004 showed that when measured by the value of the non EU international cargo imported and exported, Southampton is the UK's most important port (see Figure 7.1) significantly ahead of the rest as an export port and marginally behind Felixstowe as an import port. In addition, it is by far the UK's largest cruise port. Portsmouth ranks as the 22nd largest port and has around 12% of the traffic of Southampton.



- 7.15 The area to which these statistics refer relates to port administrative boundaries, which can be misleading when seeking to assess comparative regional significances, and are solely civilian movements. Thus the figures for Southampton and Portsmouth are given separately whilst there is no mention of naval movements from Marchwood and Portsmouth. If these were added a truer picture would emerge showing the Solent as a whole as the dominant large ship estuary in the UK with unrivalled range of commercial and naval activities.

All Ports Traffic

- 7.16 Cargo traffic through all major ports in the UK is driven predominately by foreign imports and exports, with a lesser proportion accounted for by domestic traffic. Table 7.2 show the breakdown of cargo traffic in the UK in 2005. Foreign traffic accounts for 73% of all UK cargo traffic, and imports account for over some 60% of foreign traffic.

Table 7.2 – Breakdown of UK Cargo Traffic (2005)

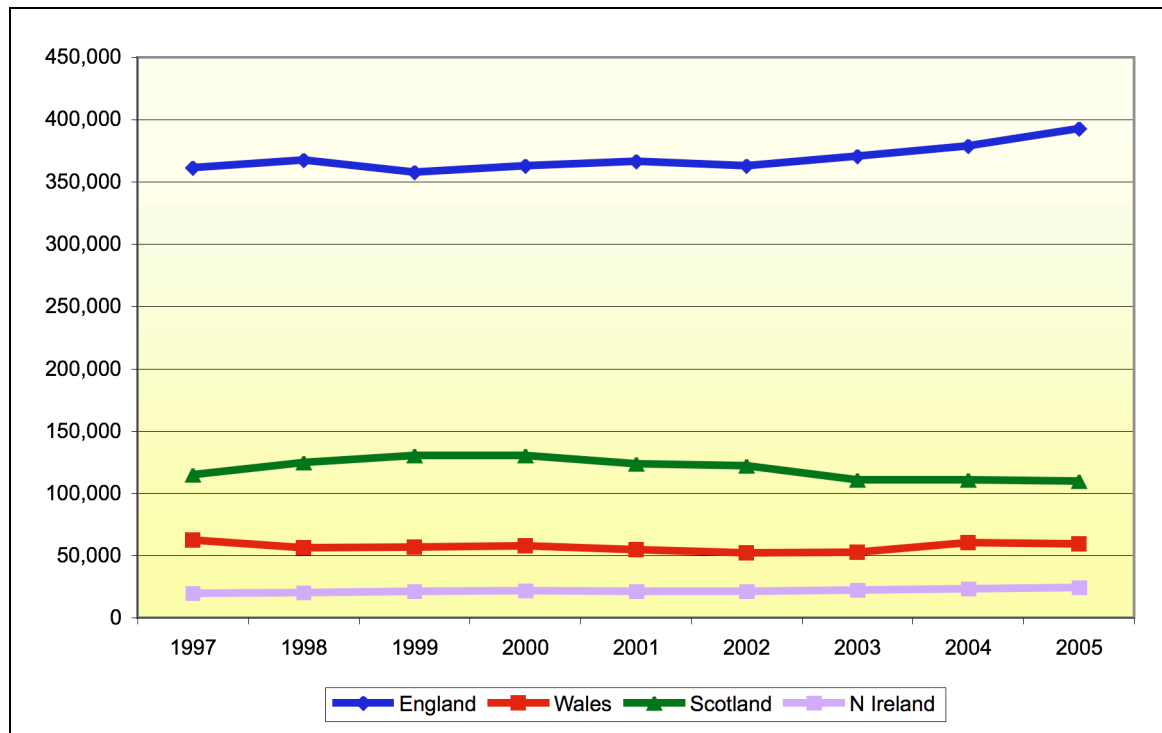
	000s Tonnes	
Foreign Traffic		
Imports	256,513	61%
Exports	160,812	39%
Total	417,325	73%
Domestic Traffic		
Inwards	87,297	57%
Outwards	64,545	43%
Total	151,842	27%
Total Traffic	569,167	100%

Source: Department of Transport

- 7.17 At Southampton, there is a heavier reliance on foreign trade in comparison to UK ports in general, with 79% of all cargo traffic either arriving to or departing from foreign destinations. Of foreign traffic at Southampton, around 69% is related to imports, which is in line with the UK as a whole. The Port of Southampton has trade links with around 100 different countries.
- 7.18 Exports are reliant in part on the manufacturing output (which accounts for around 55% of all UK exports). Manufacturing output has remained relatively constant in the last five to 10 years (Section 5) and on this basis it might be fair to assume that exports at UK ports will remain fairly constant going forward. However, ports that are net importers such as Southampton and are therefore more reliant on importing foreign goods are likely to see stronger growth in the future as aggregate demand in the UK economy grows.

7.19 The total level of traffic (exports and imports) at all ports throughout the United Kingdom has remained relatively constant from 1997 to 2005 (Figure 7.2), with a modest increase in England, particularly from 2003 to 2005.

Figure 7.2 – Trends in Total Cargo Traffic



Source: Department of Transport

Trends in Cargo Category

7.20 Figure 7.3 shows the trends in the types of cargo being moved through UK ports from 2000 to 2005. The level of liquid bulk traffic has declined over the period, while dry bulk traffic and container and Ro-Ro (Roll-On Roll-Off) traffic has increased. Other general cargo has remained relatively constant.

7.21 Liquid bulk accounts for 46% of all cargo traffic in the UK, although in decline. The Port of Southampton is the 4th largest importer and exporter of oil products and liquefied gas in the UK, and the 5th largest importer and exporter of crude oil.

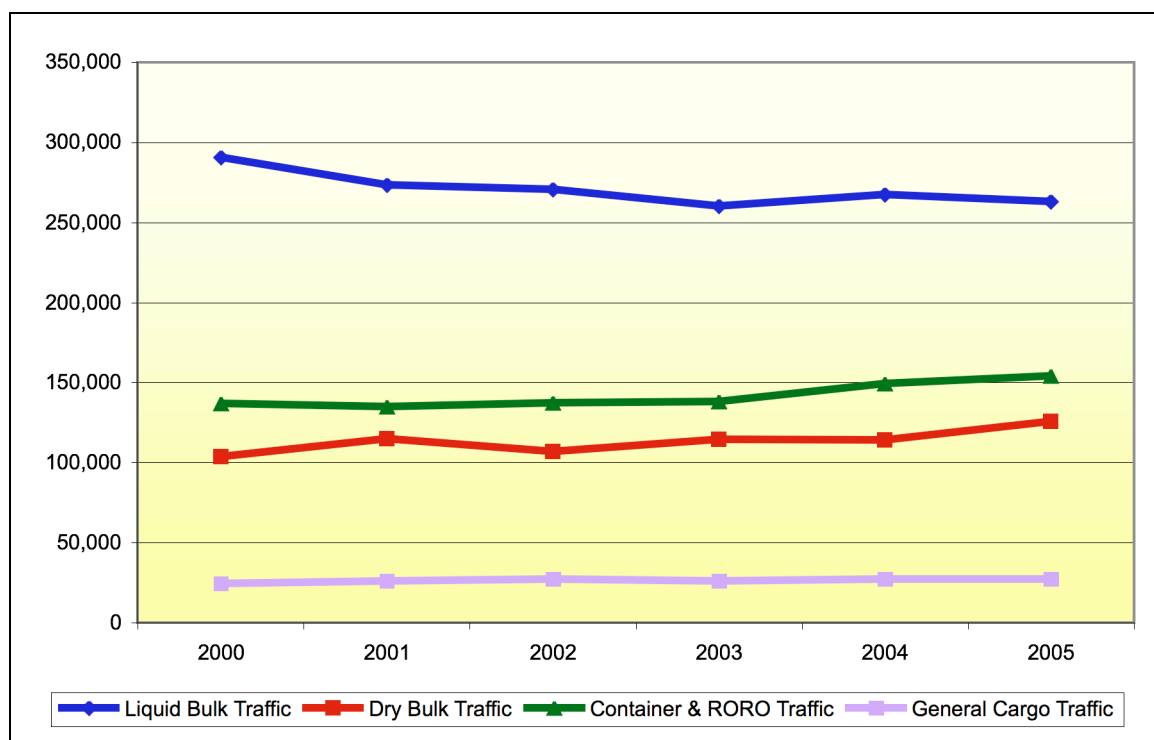
7.22 Recent statistics produced to accompany the Government's Interim Ports Policy Review indicate that during the period 1992 to 2005 container traffic through the major South East ports of the UK grew by a compound growth rate of 4.9% per annum. Over the same period the Port of Southampton (the only major south east port within the study area) experienced a compound growth rate in container traffic of 7.6%. Further to this ABP report that growth in movements at the container terminal in Southampton in the first half of 2007 have grown by a massive 35%.

7.23 The statistics accompanying the Interim Ports Policy Review forecast that between 2005 and 2030 the growth rate for container traffic will be around 4.2% per year across the UK as a whole. The far eastern market, for which the majority of trade is handled at the Port of Southampton, is forecast to increase by 4.7% per annum over the same period.

7.24 The Government's Ports Policy Review interim report states that demand for port capacity will grow, and that in time this will require a significant increase in capacity beyond that which has already been approved in the last two years. Without new developments or large efficiency improvements over the coming decade the interim report predicts constraints in deep sea container terminals in the Greater South East, closest to the main shipping routes.

7.25 The recent statistics also forecast a compound annual growth rate of 2.8% in Ro-Ro cargo between 2005 and 2030, with a recognition that without new development or large efficiency improvements over this period there will be constraints in ro-ro terminal capacity in the South East. The recent statistics also predict a growth in the amount of import and export vehicles handled by UK ports, another area in which the Port of Southampton is one of the market leaders.

Figure 7.3 – Trends in Types of Cargo



Source: Department of Transport

Passenger Activity

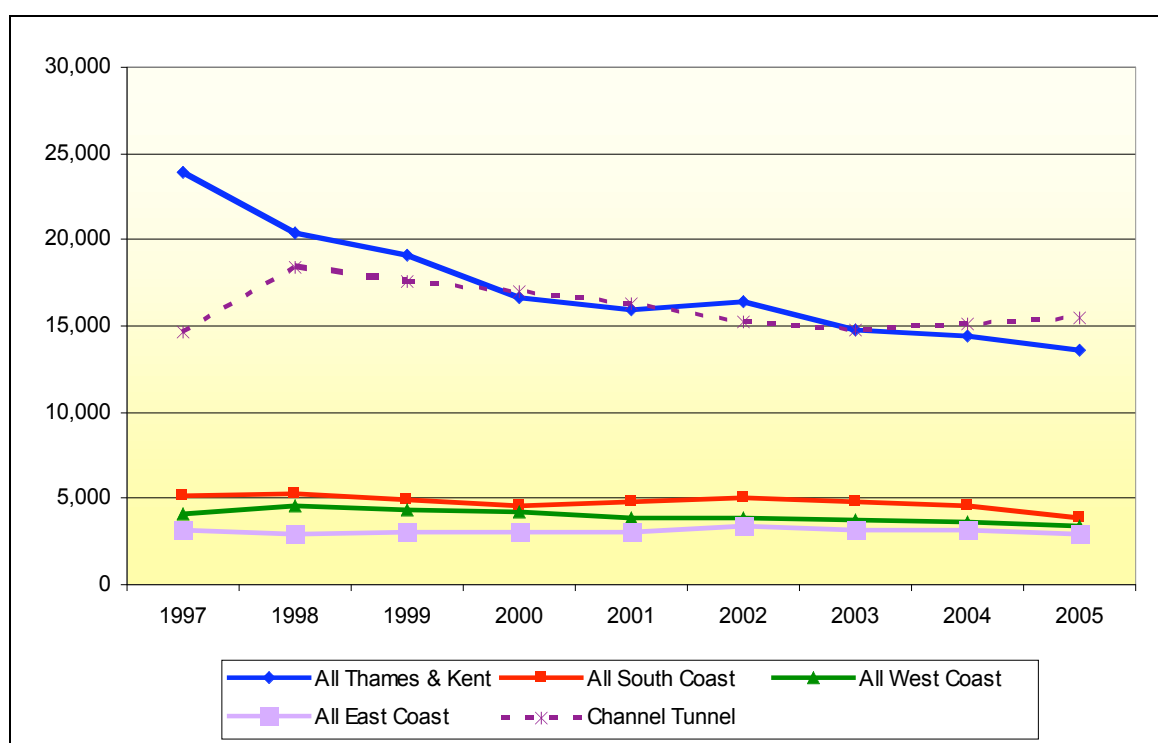
7.26 As noted in the previous chapter, Portsmouth is an important transport hub for commercial passenger traffic. Indeed, in terms of international passenger

arrivals and departures, Portsmouth is the second largest transport hub, after Dover. Lymington, Southampton and Portsmouth also act as important transport hubs for local ferry traffic to the Isle of Wight, whilst Southampton is the UK's number one cruise port.

Ferry Passenger Activity International Passengers

- 7.27 There has been a general decline in passenger numbers from 1997 to 2005 (Figure 7.4), particularly within the Thames and Kent region, which is driven predominately by the Dover to Calais route. There has also been a modest decline in international ferry passengers from the south coast (for which Portsmouth annually accounts for between 65% and 70% of all traffic.)
- 7.28 This downward trend is most likely as a result of the development of the Channel Tunnel and Eurostar (also show in the table) and, more importantly, the increase in capacity and popularity of low-cost airlines.

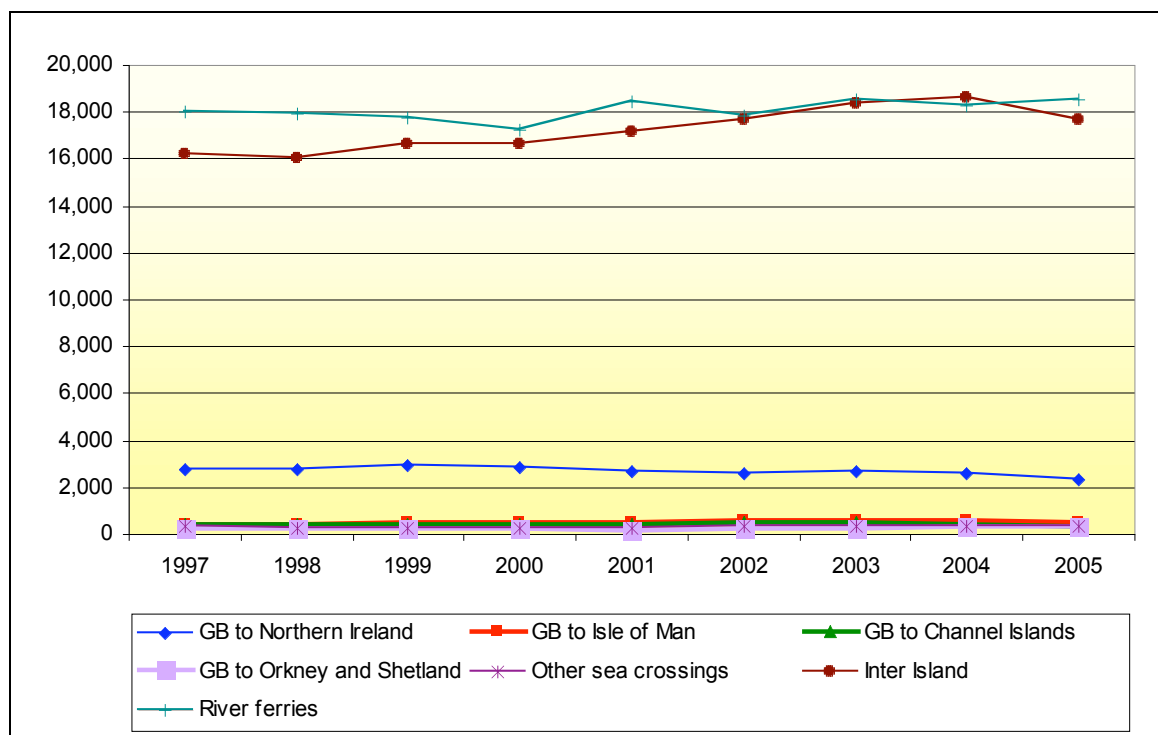
Figure 7.4 – Trends in International Passenger Traffic



Source: Department of Transport

Ferry Passenger Activity Domestic Passengers

- 7.29 The number of domestic passengers has remained relatively constant from 1997 to 2005 (Figure 7.5), showing a slight overall increase over that period. One of the key domestic routes is between Portsmouth and the Isle of Wight, which accounts for around half of all Inter Island routes. This route has generally seen an increase in the level of traffic.

Figure 7.5 – Trends in Domestic Passenger Traffic

Source: Department of Transport

Cruise Passenger Activity

7.30 Cruise tourism is one of the world's fastest growing tourism sectors. Three companies – Carnival, Royal Caribbean and Star/NCL control 35% of cruise ships and 68% of berths (Southampton Cruise Study 2005), with Carnival being the world's largest cruise company. The UK is the largest cruise market outside North America, and the Port of Southampton is the UK's number one cruise port. The economic impact of the cruise industry on Southampton and the surrounding area was investigated as part of the above mentioned cruise study which estimated that its impact in cash terms amounted to £202,235,400 and its impact in job terms amounted to 2,432.

7.31 Southampton's cruise industry has seen unprecedented recent growth with 245 cruise calls and 800,000 passengers passing through the Port this year and 290 cruise calls and close to one million passengers expected in 2008. The status of Southampton as the UK's number one cruise port has recently been strengthened by the announcement that Carnival have signed a major new 20 year contract with the Port which will see the construction of a fourth cruise terminal within the dock estate.

Port and Shipping Summary

- 7.32 Both Southampton and Portsmouth are ports of major commercial significance. However, in terms of scale and economic importance, Southampton is by far the more significant and one of the UK's key gateways for non-European trade, particularly with China and other established and emerging economies in Asia. Southampton deals with roughly half the UK's sea-borne Asian trade and Felixstowe has a similar share. This fact, by itself, underlines the significance of the Port to the national economy and the importance of national road and rail routes to and from Southampton. One of Southampton's economic strengths is that it deals in a range of trades. It is the country's second largest deep-sea container port, its largest vehicle import / export port, by a long way its most significant cruise port, and also, through Fawley, a major oil products port.
- 7.33 The commercial Port of Portsmouth has a key ferry trade in the Western Channel, and a commercial ro-ro and fruit trade, the latter significant in a national context. The commercial Port is not operationally connected with the adjoining naval port, which is the main base for UK's warships. The former has ambitions to gain a share of the cruise market, which could happen if the naval port is able to release an adjoining jetty.
- 7.34 Both Solent ports face strong competition from other ports in the UK and Northern Europe. Portsmouth has competitors in the ferry ports to the west, where Poole has recently deepened its approach channel and successfully attracted ro-ro business. Southampton is a player in a global business in which its principal competitor ports are larger, and mostly benefit from strong state involvement. Le Havre, Zeebrugge, Rotterdam and Antwerp have all expanded and offer direct call facilities from where international cargo can be transhipped to the UK.
- 7.35 Current and past limited capacity in UK deep-sea container ports encourages transshipment, which is to the UK's economic disadvantage. The economics and geography of the deep-sea container and ro-ro businesses means that direct calls to the UK are mainly through South East ports, where only Southampton and Felixstowe have sufficient depth of water to accommodate the largest container ships. Shipping lines have consistently expressed their wish to use Southampton because of its location on the main shipping route and the relative quality of its inland communications.
- 7.36 Government decisions over the past 3 years to permit the construction of additional deep-sea container capacity in the Stour estuary by land reclamation from the sea at Felixstowe and Harwich, and in the Thames by reclamation at the site of the former Shellhaven refinery, but to refuse consent for Southampton to expand onto already reclaimed land at Dibden Bay, have nevertheless led to major growth in container traffic through the existing Southampton Container Terminal. This has happened partly because the approved schemes are a long way from becoming operational (indeed, none of them has been started) and therefore there remains a serious shortage of national capacity. It is also the result of a re-affirmation of the shipping lines wish to use Southampton, a significant proportion of traffic having transferred there from Thamesport.
- 7.37 The challenge now facing Southampton is to hold on to and grow the trade it has gained and establish itself firmly as a direct-call hub of choice before

competitive capacity emerges in the Thames and Stour. However, even national forecasts predict a need for additional capacity. Southampton has an ambitious programme to increase container capacity from 2.0m TEU to 3.75m TEU through a sustainable redevelopment of existing infrastructure, reconfiguration of existing business and re-equipping with the latest handling technology to increase efficiency. With container movements growing by 35% in the first half of this year and likely to top 2.0m TEU in 2008, and expectations from shipping lines already in the Port of growing their businesses, there appears to be little national or regional recognition of Southampton's dilemma. The Port is land-locked by the urban area of Southampton and there is a limit to the growth that can be accommodated within the existing Docks. If current rates of growth were to be repeated the Port would reach capacity within a decade. Bearing in mind the length of time it takes to plan, gain consent for and build major port infrastructure this means that the problem needs to be addressed now.

- 7.38 Portsmouth's commercial port is also land locked and can only realistically expand by using any adjacent space vacated by the Naval base. As noted above, there is some prospect that this may happen but no decisions have been taken.

Ship/Boat Building/Repair and Equipment Manufacture

- 7.39 As noted earlier in the report, shipbuilding in the UK has declined dramatically since the 1960s due to competition from emerging markets in Eastern Europe (Poland) and Asia, such as China, Japan and Korea. In 2002, the sector in the UK was worth some £1.8 billion (£700 million Gross Value Added), accounting for just 0.1% of world production (Sector Skills Agreement). Although the manufacture of commercial ships has been booming (at its highest level for 30 years) due to increasing world trade, only a few markets have been able to maintain and increase their share. Some 1,034 new builds in 2003 set the new annual record, increasing Gross Tonnage from 26 million in 1996 to over 36 million in 2003.
- 7.40 Only a few large shipyards remain in the UK, along with a number of naval yards in Portsmouth, Plymouth, the Clyde, Barrow and Rosyth. The UK remains one of the major providers of warships, along with the USA, Germany and France. The naval shipbuilding industry has a good record of designing and building the most complex surface and submarine vessels for global operations and also good performance in patrol coastal warships (Defence Strategy). The Ministry of Defence has a series of orders programmed for the next 10-15 years.
- 7.41 While yards in Asia specialise in building large ships, Europe and the US have found a niche in building smaller ships with high CGT factors. (Compensated Gross Tonnage is a measurement of the complexity of shipyard work).
- 7.42 In the UK, boatbuilding has been quite strong since the 1960s. One reason for this success was the introduction of composite manufacturing materials, which have led to the development of a sophisticated boatbuilding sector. Currently, the UK is one the leading countries in the sector. Main competitors

are Italy (Italy has the world's largest boatbuilding sector), France, Germany and the US.

- 7.43 The powerboat sector has grown 90% over the last 10 years and the UK has a significant share of the global production. In 2004 the total value of exports was £839 million, an increase of 5.6% from 2003, while some powerboat builders export 90% of production. In total, the UK leisure marine sector exports some 42% of production.
- 7.44 In 2003, the UK share accounted for 14% of workplaces, 16% of employment and 15% of revenues in Europe in the sector. This is still a developing market and British yards have a great technological advantage in building smaller specialist cruise ships.
- 7.45 The UK is one of Europe's key players in ship repair, partly because of the advantage of being located on several busy trading routes, through the channel or up the east coast north of Scotland to cross the Atlantic. Both the shipbuilding and repair sectors employ some 25,000 people with a turnover of £1.95 billion (£912 million GVA = £37,100 GVA per head). The UK has gained a good reputation in this sector and is only second to Germany having seen an increasing trend year-on-year for the past five years. However, as noted earlier, ship repair has contracted in the Solent.
- 7.46 In ship conversions the UK has approximately 19% of the world market in terms of turnover. Regulations requiring the removal from service of old tankers and the general pressure to take sub standards tonnage out of service will increase demand for recycling facilities. There is adequate provision for the scrapping of smaller vessels in Europe, a market of no interest to the major scrappers in Asia. Hartlepool has created one of the largest purpose-built recycling facilities in the world.
- 7.47 The UK marine equipment industry provides a wide range of products and services for commercial vessels, naval ships and leisure boats, particularly in the areas of propulsion systems; power generation; navigation and communication equipment, electronic controls and instrumentation; deck machinery and cargo handling equipment; and coatings.
- 7.48 The industry employs some 17,000 with an annual turnover of £1.7 billion (£2.49 billion Gross Value Added). Nearly two third of domestic production is exported especially to other markets in Asia, the USA and to other European countries. In 2000, UK production had 52% of the domestic market share and 4% of the world market. Productivity levels have increased ten fold over the period since 1996 to 2000.
- 7.49 In spite of having secured a good share of the market, marine equipment companies face intense international competition; especially overseas where customers favour suppliers in their own country regardless of price. One of the key advantages of the UK sector is the linkages between marine companies and the aerospace and electronics industry, securing innovative solutions and technological cutting edge.

- 7.50 Although the UK is still one of the key players in the marine market, skills availability is a serious weakness undermining the ability of the UK industry. It is very important for companies to have a flexible workforce in terms of their adaptability to technological advances and to be equipped with the appropriate skills.
- 7.51 A report by the Sector Skills Council for Science, Engineering and Manufacturing (SEMTA) identified that French, German and US workers are a quarter and a third per hour more productive than their British counterparts, while output in France (16%) and the US (31%) is higher than in the UK. Furthermore, the proportion of the workforce with intermediate skills (associate, professional, apprenticeship, technician, skilled craft or trade) is significantly higher in France (51%) and Germany (65%) than in the UK (28%).
- 7.52 A majority of people working in the industry is expected to retire in the next 10 – 20 years. While major yacht builders have younger labour forces, their recruitment needs remain high. Despite recruitment efforts, companies are taking on less qualified and experienced staff and also sourcing from other European countries including Poland and Slovakia. There is concern that if this sourcing continues, it will affect companies mostly located in the South East, where there is inadequate employment supply and high concentration of yards.
- 7.53 In 2006, SEMTA introduced the Sector Skills Agreements. These are government initiatives that provide employers with a means to identify productivity and skills needs and the actions needed to meet sector requirements. Furthermore it offers a platform for better collaboration between employers and providers of education and training.
- 7.54 In the Solent perhaps the single most significant regional trend affecting the marine leisure sector has been the rise in commercial land values, according to some accounts making the Solent the most expensive location for employment land outside London. This is thought to reflect both a shortage of allocated land and pressure for both prime and low cost sites, and also a growing expectation of eventual residential value on coastal sites, for which purpose they can fetch a premium.

Manufacturing Trends

- 7.55 Manufacturing was highlighted as one of the key areas for discussion at the Solent Waterfront Workshop in July 2007. In this section therefore we have highlighted some of the key points of discussion from that meeting in addition to reviewing key trends within the UK manufacturing sector.
- 7.56 According to our estimates of contribution to GDP and the impact on employment of the marine sector, the sub-sector related to manufacturing (of ships, boats & other marine related equipment) accounts for by far the highest proportion of GDP and total marine-related jobs compared with other sub-sectors, equating to around 48% of total turnover (GDP) and around 52% of all marine-related sector jobs.

- 7.57 Below we review wider trends in manufacturing in the UK from 1997 to 2006, based on research published in 2006 (Benchmark Research (2006), Office of National Statistics (2006 & 2007) & Findlay Publications 2006), and the implications of these trends specifically to the marine sector within the Solent study area.

UK Trends

- 7.58 Overall manufacturing output has remained largely unchanged since 1999, although a modest increase of 1% in output was recorded between 2005 and 2006.
- 7.59 Manufacturing output has grown by 2% from 2003 to October 2006, which compares with Germany (14%), Spain (7%), France (4%) and Italy (1%). Western European countries do not fare well compared with Eastern European countries, where average growth was 38% over the same period.
- 7.60 Despite modest growth in output, as a proportion of UK Gross Value Added (GVA) manufacturing accounted for 14% in 2005 compared with 21% in 1997, and 11% of all UK jobs in 2006 compared with 16% in 1999.
- 7.61 Whilst the number of jobs has decreased as a proportion of total jobs in the UK, the sector still accounts for 3.0 million direct jobs and an additional 3.0 million indirect and induced jobs, totalling 6.0 million jobs which equates to around 23% of the total UK workforce.
- 7.62 One of the major trends since 2000 (particularly during 2003 and 2004) has been the reduction in the number of factories with 50 or more employees (the total number has fallen by 31% since 1997). Whilst the level of output has remained relatively static, this reduction in the number of manufacturing companies with over 50 employees only goes to highlight the move towards leaner manufacturing (i.e. less labour intensive and more efficient machinery). The decline in the number of large factories is roughly equal between process and discrete manufacturing locations, with a compound annual growth rate of - 4.2% and - 4.0% respectively.
- 7.63 Whilst the number of factories with 50 or more staff has declined by 31%, a reduction in manufacturing employment from these same sites has led to a 35% reduction in total manufacturing staff.
- 7.64 The number of design engineers in particular is declining (5% per annum since 2000) as well as some of these types of employees preferring to be employed independently. In addition to this, many engineers and designers are moving abroad if companies are part of significant international operations.

Sub Sector Trends

- 7.65 The most serious decline has been in the textiles sub-sector, with a total decline of 70% of factories with over 50 employees from 1997 to 2006. This is followed by the iron and steel sub-sector (44%).
- 7.66 The only sub-sector that has not experienced decline (in fact, seen a modest 2% increase) is in plastics and rubber manufacturing. After plastics and rubber

manufacturing, the automotive, aerospace, rail & ship manufacturing sub-sector has experienced the least decline, with a total decline of 11% from 1997 to 2006.

High Value Manufacturing in the South East

- 7.67 One of the key characteristics of manufacturing in the south east is the high level of high value manufacturing companies (HVMs). High value manufacturers can create value in a variety of ways. For example a company may have a unique production processes, high brand recognition, rapid delivery times, or highly customised services.
- 7.68 There are around 20,000 high value manufacturing companies (HVMs) in the UK (High Value Manufacturing in the South East - Cambridge Investment Research Ltd, 2005), and around 15% (just over 3,000) of those based in the south east. Of these HVMs, those that have the highest proportion of companies based in the South East include: manufacturers of instruments for measuring, medical equipment and pharmaceuticals. Between 22% and 23% of UK companies in these sectors are based in the south east, compared to only 15% of south eastern UK HVMs as a whole. HVM sectors which are strongly represented in the south east are: manufacture of ships and boats, production of office machinery, computers and processing equipment, manufacture of industrial process control and manufacture of glass and optical and photographic equipment. Indeed, 19.8% of all ship and boat builders are located in the SE.
- 7.69 Both Oxfordshire and Hampshire have a far higher proportion of HVMs than the other counties. For instance 22% of southeastern HVMs are based in Hampshire, while the county only has 12.5% of southeast-based companies. Hampshire has a disproportionately high number of HVMs, relative to the size of the county. Nearly fifty percent of all manufacturing of ships and boats within the southeast happens in Hampshire, reflecting its coastal location and rich history. The manufacture of ships and boats & marine technology is the biggest sector in Hampshire as evaluated by the number of companies, with 140 boat and ship manufacturers in the county.

Implications for Solent Study Area

- 7.70 Output in manufacturing in the UK has remained relatively stable since 1997 but there has been a clear decline in the number of companies and employees, particularly at companies with over 50 employees. Whilst this does not present a very encouraging profile of the manufacturing sector in the UK as a whole, it could be argued that the impact of these changes on the Solent study area will be minimal. Firstly, one of the sectors seeing the least decline in the number of large companies, and by implication, employees, is the automotive, aerospace, rail & ship manufacturing sub-sector, the sub-sector most relevant to the marine sector within the Solent study area.
- 7.71 According to our survey (which we feel is representative of the local marine sector in the Solent study area), only around 6% of the businesses in the sample that fell under manufacturing had more than 50 employees, the area that has seen the most decline. Indeed, the marine related industry in the study area is characterised by there being many small companies. This,

coupled with the fact that the marine sub-sector, appears to be holding on to its employees better than other manufacturing sub-sectors gives a positive indication for the marine sector.

- 7.72 Also, with a number of new aircraft carriers planned to be developed at the VT Groups site in Portsmouth, even some of the larger ship manufacturers are likely to retain their employees, if not grow.
- 7.73 On a less positive note, UK manufacturing accounts for around 55% (CBI Business Summary, Manufacturing 2007) of all UK exports, although as long as output remains at a constant level, or indeed grows, then the port and logistics services at Southampton should not be affected by having fewer exports to move.
- 7.74 One of the most interesting points highlighted by the published research in 2006 was that there was a general decline in product engineers working within the manufacturing sector. Our survey results were in line with these showing a significant shortage of engineers in the Solent study area.

Leisure Sector Trends

- 7.75 According to our estimates, the marine-related leisure sector (including the cruise industry, leisure activities including marinas and berthing, and marine-related retail) equates to between 3% and 4% of marine-related GDP and employment. Whilst this level sounds modest, in fact this equates to a contribution to GDP of approximately £210 million. The marine sector is characterised by there being many SMEs (small to medium sized enterprises).
- 7.76 Aside from the value that this sub-sector contributes to the economy, the marine leisure sector, in particularly sailing and water activities are essential to the Solent's character and the maritime identity of Hampshire and the Isle of Wight. Indeed many non-sailors will identify sailing with the Solent and such events as the annual regatta at Cowes. There are around 12 principal mooring areas or marinas with 20 or more berths in and around the Solent area.
- 7.77 Albeit important, dinghy sailing and yachting only represents one of a wide range of marine-related leisure activities in the Solent including angling, bird-watching, canoeing, rowing, power-boating, swimming, windsurfing, waterskiing, sub-aqua diving, and simply sitting and sunbathing.
- 7.78 General leisure trends over the past 30 to 40 years in the UK have seen a general decline in the traditional seaside holiday. This is mainly as a direct result of growth within the overseas holiday market, driven primarily by cheap holidays and budget airlines coupled with the inclement weather conditions experienced in the UK. As a result, seaside resorts and locations in the UK have suffered as visitor numbers have declined. Examples of such decline is seen at such locations as Folkestone (in Kent) and Jersey, where tourism numbers have reduced dramatically over the said period leading to poor occupancy rates at available accommodation, which in turn has led to many places closing. Over time this has had a negative impact on the local economies in general. However, the Isle of Wight is still marketed as traditional seaside holiday location, with a number of visitor attractions on the Island targeting families in particular. As shown, below, visitor numbers to the

Isle of Wight have generally been maintained over recent years perhaps because of the uniqueness of the location.

- 7.79 More recent trends in domestic tourist arrivals (overnight stays) to the southeast are shown in Table 7.4. The number of visitor numbers has declined in England, the South East and Hampshire over the past five years, though visitor numbers to the Isle of Wight has remained relatively constant at between 1.5 million and 1.9 million over the last five years. Despite negative compound annual growth rates in domestic tourist arrivals over recent years the main purpose of visits is leisure and visiting friends and relatives (83% of all visits to the south east).
- 7.80 In addition to domestic tourists, there will also be a significant number of day visitors which are not include in these estimates. Figures, and therefore trends, are not available.

Table 7.4 – Domestic Tourist Arrivals to the South East (Millions)

	2000	2001	2002	2003	2004	CAGR
SOUTH EAST	23.3	23.3	22.5	20.7	16.6	-8.1%
Hampshire	4.6	4.4	4.1	3.7	3.3	-8.0%
Isle of Wight	1.3	1.5	1.2	0.9	1.2	-2.0%
Berkshire	1.7	2.6	1.9	1.7	1.6	-1.5%
Buckinghamshire	2.0	1.6	1.9	1.2	1.1	-13.9%
Oxon	1.8	1.9	1.8	2.2	1.5	-4.5%
Kent	4.4	3.9	4.2	3.3	2.5	-13.2%
Surrey	2.0	2.3	2.1	2.2	1.4	-8.5%
East Sussex	3.7	2.5	4.5	3.4	2.4	-10.3%
West Sussex	2.1	2.2	1.9	2.4	1.9	-2.5%
ENGLAND	140.4	131.9	134.9	121.3	101.4	-7.8%

Source: United Kingdom Tourism Survey (UKTS)

- 7.81 Another key UK domestic tourism trend has been the change in profile of visits. There has been a decline in the number of traditional long holidays in the UK but an increase in the number of short break holidays. These types of short break holidays are more associated with visits to cities and places of interest, not necessarily seaside locations.
- 7.82 In Table 7.5 we show the number of international tourist arrivals to the region. These numbers are noticeably smaller than the number of domestic tourists, although still represent an important tourist market. International tourism has seen a general upward trend in numbers. The majority of visitors (around 70%) to Hampshire and the Isle of Wight are either on holiday or visiting friends and relatives.

Table 7.5 – International Tourist Arrivals to the South East (000s)

	2000	2004	CAGR
SOUTH EAST	4,137	4,366	1.1%
Hampshire	503	505	0.1%
Isle of Wight	58	49	-3.3%
Berkshire	547	528	-0.7%
Buckinghamshire	266	328	4.3%
Oxon	533	557	0.9%
Kent	760	792	0.8%
Surrey	676	691	0.4%
East Sussex	518	577	2.2%
West Sussex	276	339	4.2%
ENGLAND	21,484	25,323	3.3%

Source: International Passenger Survey (IPS)

Marine Leisure Sector Trends

7.83 According to information from the British Marine Federation (UK Leisure & Small Commercial Marine Industry Key Performance Indicators, 2005/2006) total turnover of the UK leisure & small commercial marine industry was £2.8 billion in 2005/2006. Whilst these figures are not directly comparable with previous years, the rate of revenue growth between 1997 and 2004 increased consistently by an average of 7.8% per annum, demonstrating impressive growth within this sector.

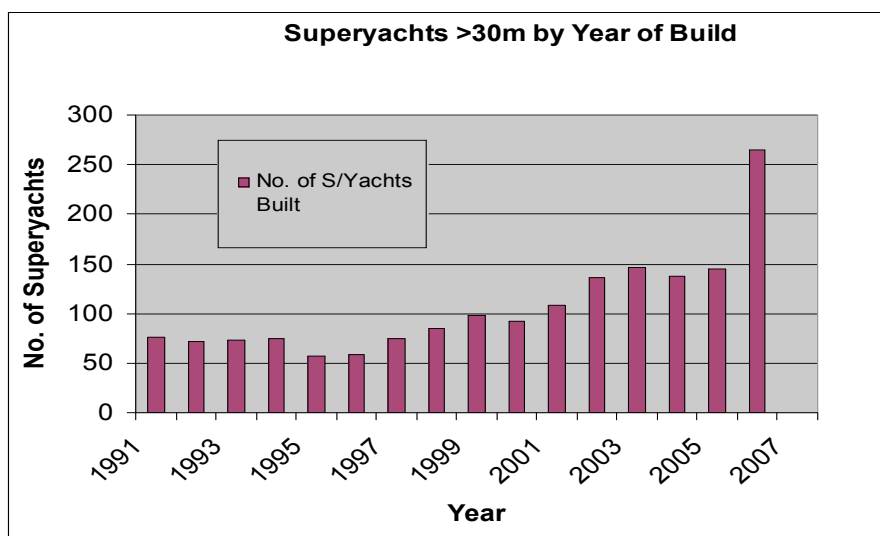
7.84 We have reviewed information published (Watersports & Leisure Participation Survey (Arkenford Market Modelling & Research, 2006) to assess trends specifically within the marine leisure sector throughout the UK. An annual survey of participation in all watersports and activities (12 core activities as defined in the survey, including major watersports and boating activities) conducted from 2002 to 2006, suggests that around 3.7 million adults participated in some form of water activity in 2006, up from 3.5 million in 2005.

Marina Demand

- 7.85 According to qualitative evidence sourced from the Solent Workshop (July 2007) the majority of marinas within the Solent area have reached full berthing capacity and many have waiting lists. Further qualitative evidence from marina operators further east along the south coast suggests a strengthening demand for berths all along the south coast over the last few years, reflected in increased berth occupancy rates. For instance, in 2005 occupancy rates ranged from 85 percent at Ramsgate and Dover to 95 percent at Brighton, of which much demand is displaced from the Solent study area.
- 7.86 The qualitative evidence which suggests that demand for berthing capacity is increasing for a range of berth types is reinforced by a study recently completed by the BMF in 2007. The report (Economic Benefits of Coastal Marinas) is discussed in Appendix 2 and highlights that the majority of coastal marinas in the UK cannot meet demand. Indeed, with accelerating demand for larger boats, additional pressure is placed on capacity. As a consequence of the imbalance between demand and supply, people are being forced to berth their boats further away from home, either elsewhere in the country or overseas.
- 7.87 Indeed, with an underlying growth in the participation of water-based leisure activities and demand for marina berths there is a need to increase marina capacity along the south coast and within the Solent study area.
- 7.88 The profile of boat ownership is becoming more diverse, owners are travelling/cruising further afield and investing in larger boats. As the size of boat increases, and with more emphasis on power and luxury boats, this is likely to affect the design of marinas.

Superyachts

- 7.89 During the Solent Waterfront Workshop in July 2007, there were detailed discussions about the superyacht boating sector. As a result in this subsection we review some of the major trends within the superyacht market. The generally accepted definition of a superyacht is a private leisure vessel over 30m in length.
- 7.90 The global superyacht market is increasing steadily. Based on discussions with researchers within the industry and data from the most comprehensive database of superyachts, it is estimated that in 1980 there were 200 yachts of more than 30m in length around the world and by 1990 there were some 1,300. The growth in the market since that point has been increasing year on year with a greater number of superyachts being produced and the length of vessels also increasing. The graph below identifies the number of new superyachts introduced over the period 1991-2006. By 1997 there were some 2,000 Superyachts and the current world fleet exceeds 3,600 (including vessels on the Global Order Book).



Source: Yacht Report database

- 7.91 In Table 7.6 we provide figures for the total number of boats of more than 50m in length that were commissioned over the period 2001-2006 and Table 7.7 provides statistics for the current order book. As identified above deliveries increased steadily over the last six years and the current order book reflects a general increase in vessel size.
- 7.92 The size of the superyacht fleet is indeed growing and this is believed to reflect underlying economic growth in the US, Europe and Asia, as well increased activity from the Russian market where yachts have become one of the highest symbols of success amongst the country's small but ultra-wealthy elite. Roman Abramovich, for example, currently owns three superyachts, the smallest of which is 86m in length (Ecstasea). There are also signs that the Chinese are starting to show an interest in the superyacht market.
- 7.93 The proportion of sailing yachts entering the fleet is reducing in size as more buyers are lured towards the more accessible and relaxed lifestyle offered by motor yachts. Indeed virtually all of the vessels over 70m on the current order book are understood to be motor yachts.

Table 7.6 – Global Superyacht Deliveries over 50m (2001–2006)

Year	51-60m	61-70m	71-80m	81-90m	91-100m	>100m	Total
2001	27	11	3	2	0	4	47
2002	34	11	9	3	0	6	63
2003	39	13	7	5	1	3	68
2004	35	16	9	7	3	3	73
2005	42	20	8	2	1	2	75
2006	46	22	12	1	1	4	86

Source: Individual Shipyards, through ShowBoats International

Table 7.7 – Current Order Book by Size Category

Size	Motor yachts	Sail Yachts
30-35m	145	21
35-40m	115	9
40-45m	76	6
45-50m	44	5
50-55m	39	10
55-60m	29	5
60-65m	13	3
65-70m	10	1
70m+	41	0
Totals	512	60

Source: Global Superyacht Order Book

7.94 In terms of volume of production of all yachts (total combined length of boats produced), the Italian shipyards (e.g. Perini Navi) lead the way. However, the average length of yachts produced in Italy is relatively modest. By comparison, it is the German shipyards, spearheaded by Lürssen and the Dutch (Oceano, Feadship and Amels) shipyards that dominate the market for large yachts. Traditionally the European market has accounted for around 70% of the world superyacht new build work.

7.95 In the UK, Sunseeker, which is located in Poole in Dorset, is the market leader but there is a greater focus on production vessels in the 30-35m range, therefore as with the Italian shipyards, the average length of yacht is relatively modest. Indeed, in terms of total production of yachts, the UK fares relatively well compared with other world locations, with 55 yachts currently on order. However, in 2006 there were only two superyachts (i.e. yachts over 50m) on order. These vessels were to be built in Plymouth.

7.96 In respect of superyachts over 50m, in Table 7.8 we show the top shipyard locations around the world in terms of total and average length of vessel. As

shown, the Netherlands is the market leader for building superyachts, closely followed by Italy. On average, the largest yachts are built in Germany (not including Singapore and Greece where there is only one superyacht ordered at each location).

Table 7.8 – Top Superyacht Shipyard Locations (2006)

	Projects	Total Length	Average Length
	Ordered	of Yachts	of Yachts
Netherlands	27	1,621	60
Italy	25	1,432	57
Germany	17	1,346	79
United States	8	436	54
Turkey	3	169	56
United Kingdom	2	143	72
Singapore	1	120	120
Australia	2	108	54
Greece	1	85	85
Total	86	5,460	63

Note :Ranked by total length of yacht

Note: Relates to orders for yachts over 50m

Source: ShowBoats International

- 7.97 The size of yachts at the upper end of the market restricts their ability to access some of the most popular cruising areas. In addition, anecdotal evidence suggests that at many world locations, the development of new marinas is not keeping pace with the construction of new boats.

Emerging Industries

- 7.98 Whilst marine leisure and port activities dominate economic activity in the Solent's marine sector and will continue to be central to the sub-region's future prosperity, it is important for policy makers to consider the specific needs of emerging marine industries in addition to those that are well established. This is particularly important for new and growing technology and knowledge-driven activities which are fundamental to enhancing the high-value component of the marine sector in the Solent and maintaining global competitiveness. The following provides examples of emerging activities that are likely to be suited to the Solent as an established marine cluster. These activities will create additional need for the provision of key waterside sites in the sub-region.

Marine Renewable Energy

- 7.99 In line with international targets to reduce emissions of greenhouse gases, the UK government has set national targets to meet 10% of national electricity generation from renewable sources by 2010 and 15% by 2015. Consequently, research has demonstrated that the harnessing of energy from fast-flowing tidal currents offers strong opportunities, particularly given that this form of renewable energy has an advantage over other technologies in that it is entirely predictable (and therefore, more cost effective). Indeed, the DTI's atlas of UK Marine Energy Resources (December 2004) shows the potential for large scale, commercial exploitation of the energy for export to the national grid from several tidal races along the south coast of England including the St. Catherine's race off the Isle of Wight. Small-scale tidal stream devices, which will operate in shallow water, have the potential to service compact waterside residential or industrial development. The provision of new energy extraction facilities will have a direct requirement for waterfront sites which, in the light of global environmental priorities, needs to be given sufficient consideration in regional and local development plans.

Marine Environmental Monitoring and Risk Management

- 7.100 The need to apply new technology to ensure improved environmental security in marine environments will increasingly provide an opportunity for commercial and research organisations in UK coastal areas including the Solent. Indeed, the existence of an established cluster of marine research organisations in the Solent area (such as the National Oceanography Centre) will provide a sound foundation for the development of new environmental monitoring centres and activities in the sub-region. Marine South East's Technology Strategy highlights 'eco-risk and security' as a strategic goal which creates the need to develop new capabilities for identifying environmental and security hazards and the means for reducing the social and economic impact of these. Priority actions for development include:

- Advanced sensing technologies for detection of environmental stresses and compromised security.
- Surface and underwater platforms for accessing hostile locations cost-effectively.
- Decision-support tools for optimising hazard responses (e.g. to oil and chemical spillages).
- New processes for avoidance of risk and remediation of impacts.

- 7.101 Inevitably, marine environmental monitoring activities will require waterside sites for research and development purposes as well as live operational activities.

Marine Research Centres

- 7.102 The Solent provides a base for many nationally significant marine-related research centres. These provide a focal point for innovation in technology and knowledge-driven marine sectors and form an important component in adding value to the growth potential of existing and emerging marine industries in the sub-region. Moreover, the physical presence of these research facilities can have a positive impact on raising the profile of adjacent and nearby marine industry waterfront sites and reinforce the efficiency of the Solent's marine cluster. Key established research facilities in the Solent include: the National

Oceanography Centre; Marine Regional Resource Centre, Southampton; Regional Centre for Manufacturing Industry, Portsmouth University; Research Institute for Industry, Southampton University Engineering Sciences; and GKN Aerospace Composites Research Centre, Isle of Wight. Plans are also being developed for the establishment of the Solent Ocean Energy Centre for the evaluation and research into marine energy technologies on the Isle of Wight. The continuing success of these and new research centres are important to demonstrating that the Solent is at the forefront of new technology development and transfer.

Environmental Trends

- 7.103 The coastline of the UK is heavily protected for its nature conservation importance. This national picture is reflected in the study area where significant stretches of the coastal areas, particularly intertidal mudflat and saltmarsh areas, are subject to national and international nature conservation designations. One of the significant matters to emerge from both the Solent Waterfront Workshop in July 2007 and face to face interviews was a perception from the different aspects of the marine industry that there is a degree of imbalance towards environmental priorities when considering marine industry development in the coastal zone and the difficulties associated with addressing a wide range of environmental issues. These difficulties were particularly felt by smaller marine industry organisations and businesses who do not necessarily have or are able to employ the necessary resources and skills to address the requirements of new environmental agenda.
- 7.104 Furthermore, it was recognised that increasingly in this respect marine industry developments are likely to be competing with other developments in the coastal zone such as coastal protection works over compensation land for the loss of or the impact on coastal habitats.
- 7.105 Linked to this matter, the issue of sea level rise was identified as one of significance facing marine industries in the coastal zone. Sea levels around the UK are 10 cm higher than they were in 1900. Scientists predict that sea levels will rise by between 2 and 9mm per year as a result of climate change. Furthermore, the north and west of England is rising whilst the south east of England is slowly sinking. In the South East of England the global rise in sea level and the sinking of the land results in sea level rises of 5.4mm per year (Environment Agency website).
- 7.106 Sea level rise puts low lying land at greater risk of flooding, with potential effects not only on residential areas but also on a significant number of marine industries located within these areas. It also increases the chances of storm surges breaking through sea defences and causing flooding. It also has implications for marine access as it can change sedimentation patterns in estuaries and inlets with potential implications for increase dredging to maintain access to harbours and ports. In areas with hard flood defences coastal squeeze may also occur, where as sea levels rise against a hard barrier such as a sea defence or rocky cliff and areas of beach, mud or marshes will be reduced in size and eventually lost. Finally sea level rise may also cause some species within the coastal zone to disappear if they cannot

adapt. For example it may be impossible for saltmarsh plant species to migrate inshore.

- 7.107 Marine industries are unlikely to be protected from sea level rise, other than incidentally under plans to improve flood defences. Some land currently occupied by strategically important marine industries is at significant risk from sea level rise a worst case scenario being the loss of existing waterfront sites in active employment use. Current and emerging policies for dealing with climate change refer to risk management being the most appropriate response rather than simply flood defence. Options such as land reclamation and managed realignment are likely to need to be considered. Decisions on future development on waterfront sites vulnerable to sea-level rise are likely to require a different policy response, one that has to weigh up the short and medium term economic advantages of development that may be unviable in the longer term. There is also the question of how policies will develop in response to the potential loss of habitats, such as mudflats, through climate change. Erosion of the existing coastline may remove existing environmental constraints to marine industry growth or simply be replaced by new initiatives by way of compensatory measures for habitat creation and re-creation.
- 7.108 In addition to the likelihood that the future will see greater environmental controls imposed on the coast, the number of regulatory authorities is likely to increase if a new system of marine planning is introduced. At the moment the Solent coast comes within the remit of 13 planning authorities (14 if the regional planning body is included) and seven harbour authorities.

Clusters

- 7.109 In 2003, SEEDA commissioned the South East Marine Sector Business Issues: Prospects for Clustering Research. In the report the South East is identified as the most important UK marine region. An analysis of the marine sector showed although there are a number of large companies, the array of small firms related to the industry, make it difficult to indicate the extent of the supply chain and target policy efforts. It is recognised that a business strategy to maintain and increase the competitive advantage of the industry would have the concept of clustering as a focal point and it is suggested that local networks and clusters should be supported.

Megatrends

- 7.110 The term 'megatrend' is used to describe the dominant forces that are likely to shape the Solent's marine industries in the future. Megatrends are not simply economic although these, which are predominantly global in origin, are clearly important. It is helpful to pick out those that are locally important and place them in the context of likely environmental, social and regulatory change, particularly planning.
- 7.111 The most obvious 'megatrend' is that very few efforts have been made over a period of three decades to support the growth of marine industries in the Solent by way of land use policies. It is true that sterling efforts have been made to influence decision-makers responsible for deciding the future of naval and defence employment in the Portsmouth area, but this has been in the nature of

a rear-guard action to avert the serious consequences that would ensue from complete withdrawal. It appears that the authorities came to expect that marine industries were declining and were more likely to be the sources of land for 'regeneration' than require additional allocations.

- 7.112 We have recorded earlier that the last time that serious efforts were made on the mainland to help a marine industry grow were in the 1970s, when land was allocated for the expansion of the Port of Southampton and for the needs of Port-related industry. As we have demonstrated, both attempts subsequently failed, and at the moment appear unlikely to be repeated. Therefore this 'megatrend' remains current.
- 7.113 An associated 'megatrend' has been the steady erosion of the basic resource of coastal land suitable for marine industries. This has occurred directly, because other uses have been preferred on marine sites, and indirectly, as other uses have encroached onto marine sites. This trend continues, apparently without regard to the consequences for marine industries or the possibility that the coast might be required in the future for manufacturing activities or transport. It has been supported by the short-term horizon required of most development plans and the lack of any strategic guidance to the contrary.
- 7.114 A further megatrend, also one which we think is still maturing, is the imposition of progressively more stringent regulatory controls on activities both inside designated areas and generally, on the marine environment, the effect of which is to constrain or prohibit the ability of marine industry to expand or adapt.
- 7.115 Taken together, these 'megatrends' present a picture of a reducing and increasingly constrained coastal resource in which, in the absence of creative proposals to provide for them, the future for marine industries will be one of inevitable decline. Real growth is not possible if there are no new affordable coastal sites for marine industries and replacement of failed marine industries by new ones is thwarted by a predisposition to residential or other higher value use.
- 7.116 Economic 'megatrends' are dominated by the continuing globalisation of trade and manufacturing, the rise of manufacturing capabilities in newer and also traditional economies, often with State support; and changing lifestyles and social contexts to which the marine leisure industry has to adapt. In order to take advantage of the opportunities offered by globalisation it is necessary to have sufficient physical options to accommodate growth of existing firms and attract others that will strengthen and widen the existing economic base. Such flexibility is constrained in the Solent by high land and labour costs and environmental constraints.
- 7.117 Two environmental megatrends are of particular importance to marine industries in the Solent: rising sea levels which are accompanied in this area by sinking land levels and the likelihood that the future will see greater environmental controls imposed on the coast with the number of regulatory authorities likely to increase if a new system of marine planning is introduced.



8. Analysis and Conclusions

8. ANALYSIS AND CONCLUSIONS

Analysis

- 8.1 We are confident that we have identified the general scale and nature of marine industry in the Solent study area. However, the relatively amorphous nature of the industry and the difficulty of identifying and applying precise definitions mean that we may not have identified its full extent. We have also taken a cautious approach to ascribing value to their economic contribution. For example, we have excluded from consideration the economic contribution of the Portsmouth Naval Base, the large Esso/Exxon facilities at Fawley, tourism expenditure relating to cruise related impacts and the various education establishments. These elements of marine industry have been excluded partly as their significance has already been determined in other studies and also partly in order to avoid being accused of unfairly weighting the figures.
- 8.2 Nevertheless, these highly significant components of the local economy are in the Solent area because they use and require deep-water access or are associated with uses that require such access.
- 8.3 Even with these exclusions, the business study and other research indicate that marine industries form approximately 18% of the Solent economy in terms of GDP which equates to a gross aggregate turnover of around £3.6 billion and Gross Value Added worth approximately £2 billion. In employment terms, even with these exclusions the sector's economic contribution is on a par with that made by financial services and education.
- 8.4 With the additional activities omitted added back in the figures would be significantly higher. Including the omissions it would be sensible to proceed on the basis that the marine industry sector within the Solent makes up at around 27% of the Solent economy.
- 8.5 The Solent marine economy delivers good added value and has good prospects for growth. The survey sample indicated an average turnover of £125,000 per employee, which is significantly greater than the regional average of £48,000 for all employment sectors in the South East. The economic contribution of the marine sector in terms of sub-regional GDP (18%) is much higher than the proportion of employment (around 10%) would suggest. It is therefore reasonable to conclude that the marine industries in the Solent are of relatively high productivity and includes activities that align with the policy focus on 'Smart' growth advocated by the Regional Economic Strategy and draft South East Plan.
- 8.6 The future of marine industries is therefore a highly significant matter for those seeking to support and implement the economic growth set out in the draft South East Plan and the Regional Economic Strategy. We see the future role of PUSH as critical in this respect. It needs to develop spatial, economic and land-use planning policies that support the growth of the marine sector. This requires policies directed specifically at its needs. Unlike other major sectors of the local economy, such as education, health, retail and financial services, which have fairly standard spatial requirements, marine industries do not fit

conventional statistical frameworks, and they also have particular and demanding locational needs. We also note that some elements of the Solent Marine economy, notably the Isle of Wight, do not fall within the PUSH area.

- 8.7 Another key observation is that the use marine industries make of coastal land and waters is the most tangible thread linking all of them. This has two significant implications. First, it is difficult to present marine industries as a single economic cluster in the conventional sense or to have a 'one size' policy that will support them all. There appear to be three major clusters; ports and shipping; naval and defence; and marine leisure. Each of these major clusters is a definable industry in its own right, with particular needs and prospects, and each has within it a number of smaller clusters, some of them highly specialised and frequently overlapping the other major clusters.
- 8.8 The second implication is that, bearing in mind that there is a degree of competition between the major clusters for available sites; the availability (or more accurately, the non-availability) and affordability of coastal locations are key factors for the prospect of marine industries for a significant proportion of those contacted as part of this study. Suitable coastal land and water space, on which marine industries depend, is restricted by nature and by policy constraints.
- 8.9 The response to the business study shows a high proportion of stand-alone and relatively small businesses, although the ports, shipping and defence activities are certainly dominated by very large companies, including several global organisations.
- 8.10 Well over half (58%) of those who responded to the survey indicated that they wish to invest and expand over the next five years. Even allowing for the possibility that proactive firms may have been more likely to respond to the survey, this is a sign that marine industries in the Solent are dynamic. It is clear from the response to the survey that planning / access restrictions and the expense of accommodation are key concerns.
- 8.11 Evidence from our detailed interviews and consultations suggests that the position in some sectors is approaching or already at something of a 'tipping point'. There is already a lack of available and affordable expansion or relocation sites or places where new marine industry ventures can be started. What becomes available tends to be either sites left by failed marine businesses or one cluster taking part off another cluster's resources, neither of which actually expands the overall value of marine industries in the Solent.
- 8.12 We found consultees well aware of the difficulties they faced if they wished to expand and remain in the Solent. For many these are problems they wish they did not have to face. Several reported that they were scarred from lengthy battles to secure small extensions to their existing premises.
- 8.13 There are three reasons for thinking that a 'tipping point' has now been reached. First, the rise of global manufacturing offers firms the prospect of relocating entirely – or at least moving their manufacturing, leaving merely a shop-window in the Solent – to cheaper locations. One of the reasons they gave for staying was the marketing value of a Solent location and the skill

base that still existed there. However, the age structure of the workforce will require major investment in recruitment and skills development in order to retain this advantage. Unless this is done, the age structure of many marine industries' workforces may undermine the competitive advantages of the Solent as a location for marine activities.

- 8.14 Consequently, there is a pressing need to ensure that the marine skills base of the Solent is maintained and enhanced particularly in key areas such as management and leadership, 'lean' manufacturing techniques and multi-skilling for craftspeople. This will require significant investment in recruitment and skills programmes in the sub-region. Moreover, initiatives should be put in place to ensure better co-ordination and take up of existing skills programmes such as those offered by MEMSP, the Hampshire and Isle of Wight CoVE for marine industries and the Regional Resource Centre (see Section 4).
- 8.15 The second reason for believing the area is at a turning point is that urban locations near the coast which might previously have been expected to yield lower cost premises suitable for marine industries have been and are continuing to be re-developed for housing, often high value properties. Many 24/7 marine businesses suddenly find themselves operating in close proximity to residential premises occupied by less than sympathetic neighbours. This puts pressure on existing marine uses but also restricts the opportunities for the development of new marine uses.
- 8.16 The third reason we put forward is that, in the case of many of these businesses, simply restricting activities to the existing footprint may not be an option, and if it is, an entirely different industry would result.
- 8.17 In the opening sections of our report we dwelt on the background to marine industries in the Solent. This was intended to show that marine industries have established and grown in the Solent because of its natural and locational advantages. We emphasise that these are not simply historical assets, they remain of great value in a global economy. We also consider the 'history' to be a vital element of the international reputation of the Solent and the basis of a recognisable 'brand'.
- 8.18 We also pointed out in the opening sections that it is essential to take the long-term view. Marine industry can, and sometimes does, put up with some fairly ad hoc and relatively temporary structures, but the basic infrastructure of coastal land, back-up land, quays, slips, docks, boat lifts, rail terminals, access roads, deep-water and navigation systems are there for the long term. If that infrastructure is physically eroded or its capability reduced, as is happening, or if it is not extended to modern standards, which is also often the case, then long term decline is inevitable. The most notable example of this effect is in ports and shipping where upward trends in vessel size and global trade mean that the 'entry level' for participation is becoming ever more demanding. Failure to match customers' needs simply means the business dies. We are in no doubt that the response to this issue will have far reaching consequences for the kind of marine industry that will be in the Solent in two or three decades time.

- 8.19 We found some businesses acknowledging that they may not be permitted to expand in a major way and are planning their business strategy accordingly. They know they will have to leave if they want to get bigger. Whilst it gives some satisfaction to those who would see activity maximised on existing sites before new sites are sought, it does not appear to us to be a sustainable approach beyond the short term and if the intention is to rely on marine industries for a staple growth in the sub-regional area.
- 8.20 High land and rental values, on some evidence among the highest in the South East region, are a major concern for marine industries, especially those manufacturing businesses where margins are tight and competitors labour and land costs elsewhere are substantially cheaper. Sites suitable for marine industries that do become available are frequently entirely unaffordable in the face of competition from higher value land uses, in particular residential. In a market economy, where planning policies provide no protection from market forces, this means that marine industries will not survive. The position is complicated by some smaller, perhaps family-owned businesses, of which there are several in the marine leisure sector, who own the freeholds of their sites who would like an eventual residential value.
- 8.21 We think that the combination of supply and affordability of land and premises for marine industry are vital issues, certainly for the ports and shipping and marine leisure sectors. The position in the naval and defence sector appears to be less critical in the short term, but only in the long term if sufficient land that may be released within the MoD portfolio and suitable for marine industries is retained for that purpose.
- 8.22 The problems created by high land and premises costs could be viewed as analogous to the long-standing problems of high housing costs. For some years planning policies have required the provision of affordable homes as part of any housing scheme and it would be possible to envisage a similar approach to employment land for marine uses. However, even if applied to employment land, this would take some years to become effective on any scale and the locational requirements of marine industries would make it extremely difficult to implement. There is probably no alternative to direct involvement by SEEDA or local authorities, and it is noted that SEEDA themselves do directly control various waterfront site within the study area.
- 8.23 Planning authorities have for some time been encouraged to plan for residential development on previously developed, urban sites. Achieving a high percentage of such development is a key national target, ostensibly to protect greenfield land. However, as well as the direct effect on the prospects of maintaining manufacturing on marine sites outlined above, this national policy has much reduced the supply of affordable land for essential, generally low land value uses that support marine industries, especially the Port of Southampton. The concomitant restraint on the development of sites on the periphery of urban areas has spread the pressure further afield to the extent that any connection with the coast is lost. The consultant team were told of port-related businesses being directed to Andover and Basingstoke to find sufficiently large areas of storage land.

- 8.24 Skills are a key consideration in the future of marine manufacturing, especially boat building. At the moment Solent manufacturers can offset the disadvantages of a high cost location by offering superior skill. Many respondents and consultees said that the age structure of their workforces led them to doubt the sustainability of this approach in the long term.
- 8.25 The related issue of the availability of local housing was a concern in the high cost areas such as the New Forest, but less so in the main urban areas. Even in the latter areas, however, some consultees wryly observed that the type of housing being built on sites next to marine industries (which made it difficult for manufacturing and other noisy or odorous activities to continue) made no contribution to meeting local housing needs (often being bought as investments or second homes), raised the value of land above what marine industries could afford, and meant that their workforce found it difficult to find affordable housing anywhere near their work.
- 8.26 The Port of Southampton requires special consideration because of its overwhelming importance to the local and regional economy. The main problem the Port faces is that it is land-locked by the city behind it and can only intensify on its existing site, which it is valiantly doing. To our knowledge there are very few, if any, other major ports in the world (all of whom are having to cope with the same great demand to expand their capacity and infrastructure) that have not significantly extended or have plans to so in the near future. Certainly all Southampton's European competitors have done so.
- 8.27 It would be comforting to be able to suggest that the Port could simply stay the same size, but the reality is that if it cannot meet the requirements of its customers, the international shipping lines, then they will cease to use it. This could happen abruptly. The Port is not a single entity. It consists of hundreds of separate businesses, many of them international companies and mostly with a growth agenda. Consultees confirmed to us that, bearing in mind the decision not to permit the Port to expand on to port land at Dibden Bay, and their awareness of the tightness of the land supply, they continually have to consider their long-term future in Southampton. We are not in a position to advise when the Port will finally run out of land, but from the available information we believe the issues that would raise brings it very much into focus as an immediate issue.
- 8.28 The professional, educational and administrative services that support and relate to the commercial, defence and leisure marine industries include some of the key employers in the Solent. Firms such as Lloyds Register and Carnival have yet to arrive in strength but they and ones like them will, we suggest, be key not simply to the growth that the draft South East Plan seeks in the sub region but also to help establish South Hampshire as a sustainable urban area offering a wide variety of employment opportunities that can stand on its own, independent of lengthy commutes to London and other centres. The point, if it needs to be made, is of course, that these firms are here or are coming because of the Port and the established marine economy.
- 8.29 As already indicated it is clear that, at the most strategic level, the importance of the study area for marine industries is founded on three activities: the commercial port of Southampton, the defence port of Portsmouth (which

administratively includes the military activities at Marchwood) and the marine leisure and recreational business based on three centres: Lymington, River Hamble and Cowes. Marine leisure activity extends across the whole of the Solent region, beyond the sub region area, and Portsmouth Harbour, the Isle of Wight, Lymington and Chichester Harbour are also an important focuses for activity. These three activities are all nationally important and world leaders in their fields. Stripped to its essentials, this is the essence of the marine asset in the Solent. If any of these activities fail or falter, then we think the consequences would be significant. The corollary is that it is necessary to plan for each of these three sectors to prosper.

- 8.30 Clearly, the core activities can only survive if they are supported by other facilities. A number of consultees confirmed that there was added value in the combination of all three clusters, albeit that they did not have a lot in common operationally. There is clear synergy with many professional and regulatory services and also the general ethos and reputation of the Solent as the centre of maritime things is not simply marketable as a brand advantage but the congregation of such a variety of marine related industries in one (attractive) location is seen as a distinct advantage. This was so not just in the consumer-led world of marine leisure but also in other areas where business contacts spread widely across the clusters.
- 8.31 It is obviously important to look at the problems faced by marine industries in the context of the Solent as an environmental resource. We are concerned about three matters in particular: the difficulties marine industries face in implementing compensatory measures in the event that their proposals have an adverse effect on the integrity of European Sites; the effect of increasing flood risk; and the other effects of climate change.
- 8.32 In respect of compensatory measures for habitat loss, we think the need for these is poorly understood within the industry but of great potential significance for those marine industries wishing to expand. This is likely to become an increasing problem for small businesses and could stifle aspirations. We see this also as a critical problem, that needs to be properly addressed and a programme worked out to ensure that land for this purpose is safeguarded and made available to those who might need it to effect their proposals. It will be most important to work with Natural England and the Environment Agency.
- 8.33 Flood risk appears to be a significant problem for marine industries, in the Portsmouth area in particular. The level of risk appears high and potential solutions to protect residential properties (which other than coincidentally would not be expected to protect marine industries) might have significant effect on marine industries. The other effects of climate change include stress on the environmental resources, including the intertidal, which could also lead to strong contra-indications for growth of the marine sector.

Conclusions

- 8.34 In view of the significance of marine industries to the local economy there needs to be recognition of their regional and national significance and the problems they face, and support for them to expand their contribution. At the

moment there is very little of any of these.

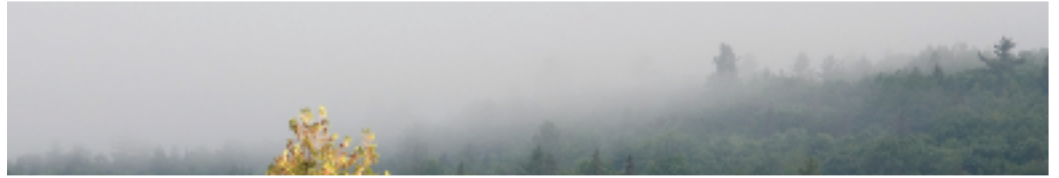
- 8.35 It should be clear that the consequences of inaction would inevitably be decline from the current position and a change in the structure of the remaining maritime industry. This would unlikely be a gentle process. It is possible to envisage a scenario in which the manufacturing component of marine industries largely disappears if it simply becomes too costly to manufacture in the Solent and the skill base declines. It is also possible to see that without the ability to expand, the Port of Southampton will lose its status as a major direct call port.
- 8.36 The needs of each of the core marine clusters should be addressed separately, but we see advantage in not simply recognising the importance of the Solent as the centre of UK marine industries, but actively promoting it as a place of growth and innovation.
- 8.37 A major problem in that approach at present is that there is virtually nowhere to accommodate substantial marine industry growth or innovation on any scale, and this problem needs to be addressed as a matter of urgency along with resolution of the dwindling availability of existing marine sites. There is also the difficulty of the complex administrative arrangements for planning the Solent, which means that change is difficult to achieve and extremely slow. The Solent is, at least in the context of this study, 'overplanned'. There is a plethora of initiatives implemented by a wide range of organisations, and literally scores of statutory planning policy documents are emerging from the 14 local authorities that cover the coastal zone to low water. There are few mechanisms to ensure that an overall view is taken and the key decisions are properly addressed. Marine industries suffer because they frequently operate across administrative boundaries and policies generated by this arrangement favour land-based activities. In our opinion, marine industries would be better served by focused action led by a few partners that strikes at the heart of the problems faced by marine industry.
- 8.38 It is essential to consider the land and water needs of marine industries in the context of a positive approach to conservation of the environment. We suggest that the present systems of regulatory controls without a proactive approach to the creation of new habitats on at least a Solent-wide basis (if necessary, much further a field) is unsustainable in the long term. The issues of rising sea level and flooding risk need to be included, since they affect maritime industries.
- 8.39 It would be desirable to assess the practicability of a policy to provide land suitable for marine industries. We are in no doubt that it is essential to keep coastal land suitable for marine industries available for that purpose in the long term, whilst recognising that there may be occasions when it is necessary to sacrifice some land in order to facilitate growth in a particular circumstance. It will be necessary to accept that such land might not find an immediate occupier. This will require a proactive and strongly worded set of LDF policies that are consistent amongst all the Solent local authorities. The Panel's report on the draft South East Plan indicates that such an approach is appropriate given the importance of the marine sector not only to the Solent economy but to the South East as a whole. In devising and implementing such a strategy, it

will be critical for Local Development Plan Documents (LDDs) to identify key waterfront sites and locations that should be protected primarily for marine and closely related uses. These policies will need to be set within a clearly presented context which demonstrates and explains the economic and social significance of maintaining and enhancing the Solent's marine activities. Much of the evidence presented in this report can be used to establish the rationale for such a policy, although LDDs should also provide robust evidence which highlight the role and importance of the marine economy to local authority areas.

- 8.40 Before identifying key sites for safeguarding, authorities in the Solent sub-region should undertake a coherent and consistent site identification and assessment process. This identification and evaluation process will be central to the provision of a robust local evidence base and allow for the development of effective planning and economic development policies.
- 8.41 In developing proactive planning policies to safeguard sites and locations primarily for marine activities, local planning authorities need to overcome existing perceptions that the marine sector is less economically significant than other, more readily defined employment sectors which, by their nature, are less diverse. This will require the provision of supporting information which explains the diversity of the marine sector as well as highlighting the extensive indirect economic benefits arising from its complex and deep-rooted network of suppliers and customers, most of which are located within the Solent sub-region.
- 8.42 The rationale behind marine industry policies should be translated into a clear set of criteria which can be used to determine the priority sites for safeguarding. Exception criteria may also be employed in marginal circumstances, particularly where strong competition amongst different land-uses is likely to be evident. However, such exception criteria should be set in the context of a presumption of the priority being for the provision of accommodating marine industries. Consequently, the criteria should permit the development of non-marine uses only where the achievement of over-riding economic, social or environmental priorities will be met by the proposed development. Moreover, it is essential to stress that that these over-riding objectives must be clearly defined and reflected in an unambiguous set of criteria.
- 8.43 Implementation of a successful marine land allocation policy approach is essential not only to provide a sufficient quantum of land and premises to meet the needs of new, expanding and diversifying marine activities but to ensure that land and premises are affordable to marine businesses. Without a planning approach that can provide certainty regarding the future supply of suitable waterside sites and premises for marine use, the inevitable consequence will be that many existing businesses will be priced-out of their established locations by higher-value uses. Equally, sets of land allocation policies must be sufficiently robust and effective to ensure that sites are used for their intended purposes.
- 8.44 Whilst effective land allocation policies will play an important part in ensuring the provision of affordable sites for marine businesses through normal market

conditions, there may be circumstances where public sector intervention may be required. This is likely to be evident where market failure results from abnormally high development costs which make it unviable for developers or owner occupiers to implement proposed marine schemes (for example, because of land remediation, access or land assembly costs). To avoid planning blight and to ensure the establishment of marine businesses at key sites, it may be appropriate for SEEDA and its partners to consider a range of intervention initiatives aimed at funding the viability gap in specified circumstances (subject to State Aid Rules). These may include gap funding, direct development, capital grants, joint ventures or low-cost loans.

- 8.45 Our final conclusion is to emphasise that those responsible for the success of the Solent have a real choice in what it wants from its marine industries. It could bask in the memory of when Southampton was the Gateway to the World, Portsmouth the Home of the Royal Navy and Cowes as the Mecca of World Yachting long after those labels ceased to have meaning. They do at the moment, but keeping them relevant requires significant action.



9. Recommendations and Implementation

9. RECOMMENDATIONS AND IMPLEMENTATION

- 9.1 The Strategy should be based on clear recognition and general acceptance of the fundamental importance of marine industries to the sub-regional and regional economies. This should be linked to a commitment to take action to support and provide for their expansion, where that is a reasonable prospect. The overarching long-term objective should be to grow the marine economy as one of the building blocks of sustainable prosperity.
- 9.2 Leadership in this area is presently fragmented and we do not underestimate the challenge presented by the need to change traditional approaches in order positively to promote marine industries. In particular, we consider there to be a need to take action to identify and protect locations for future growth and ensure that the spread of other land uses does not inhibit existing and future marine industrial activity.
- 9.3 It is essential to take a longer-term view than is normal in spatial planning. In respect of marine infrastructure and potential sites, far longer - we suggest at least thirty years. Before key sites are given over to other uses, or designated for conservation purposes, very serious consideration should be given to the need to retain them for marine industries. The loss or constraint of marine industry sites could make it difficult if not impossible to achieve the overarching objective.
- 9.4 We suggest key targets should be to:
- i. gain regional and national recognition of the economic importance of marine industry in the Solent, and the need to provide support for its growth;
 - ii. establish the overarching objective as one of the foundations of spatial policy;
 - iii. promote innovation and expansion of existing marine industries and growth of the core marine clusters, which requires the attraction of new marine industries, and related activities that will strengthen and expand existing clusters;
 - iv. safeguard marine sites suitable for marine industries in planning policies, including consideration of non coastal land as suitable for marine industry purposes;
 - v. with partners, analyse and address the economic-environmental balance at sub-regional level, particularly in relation to nature conservation, climate change and sea-level rise;
 - vi. address the issues of the lack of affordable land and premises, including direct intervention;
 - vii. identify and address skills and training requirements, and age-imbalance, as a matter of priority, and
 - viii. simplify and strengthen strategic planning arrangements for the Solent.
- 9.5 We consider each of these components separately, setting out key recommendations for each.

Achieve National and Regional Support for Solent Marine Industries***Recommendation 1***

- 9.6 ***SEEDA, the PUSH and other relevant authorities, and business partners should seek to influence Government to ensure that the national and regional significance of marine industries to the Solent area is recognised, for example in RSS and emerging government policy, and provides support for the firm foundation of marine industries in future Policy.***

Implementation

- 9.7 Although the recommendation is to SEEDA, all relevant local authorities and business partners, it is considered that SEEDA and the PUSH authorities have a clear leadership role. However it is also recognised that they also require a mandate for action. The relevant authorities and partners will need individually to commit to supporting and sustaining the growth of marine industries as part of the future economic strategy for the sub-region.

Promote Innovation and Growth and Support for the Core Marine Clusters***Recommendation 2***

- 9.8 ***The Solent is the centre of UK marine industries and SEEDA, the PUSH and other relevant authorities and marine industries should raise the profile of the importance of the Solent as such and actively promote it as a place of growth and innovation.***

Implementation

- 9.9 There is considerable scope to promote the success of Solent marine industries more widely and coherently. We see benefit in SEEDA, working with the PUSH, other relevant authorities and the marine industry in particular, actively promoting the Solent as the centre of UK marine industry, with an emphasis on its strengths in the fields of innovation, technology and education, recognising that it is home to internationally renown specialist industries at the leading edge of product development. Facilitating and encouraging new marine businesses in future potential growth sectors (such as the repair and re-fit market, particularly super yachts) would make sense. The geographical strength of the Solent, its marine infrastructure and assets should also be promoted. This should include the Solent's role as a centre of excellence for research and education in marine and other engineering disciplines. Key flagship research facilities include the National Oceanography Centre and the Marine Regional Resource Centre.
- 9.10 We suggest that SEEDA develops a clear, co-ordinated marketing strategy to raise the profile and significance of the industry, with a clear distinction between the requirements of the commercial ports sector and the marine leisure sector which operate in quite different markets. We suggest that there

may be scope to look beyond the UK, to target marketing and advertising across Europe and globally. Success can be celebrated using a variety of media including the local and national press, publicity material (including web-sites) and articles in industry publications. A series of workshops with local politicians and a wider conference to target partner organisations and marine businesses may also be a good way to both launch the Strategy and raise the profile of the industry. The aim should be to build local, regional and national confidence in the Solent marine industry as a key and growing component of the UK economy.

- 9.11 It will be necessary to raise awareness of the significance of marine industries as a key economic sector and driver of economic growth and that the Solent marine sector comprises a range of high value/high productivity activities which meet SEEDA's and the Regional Assembly's drive for 'Smart' growth. It will be important to achieve local and regional political support for the need to invest in key training initiatives and identify sufficient sites, both of which will be required to deliver 'smart' economic growth. There is scope to communicate key messages through the LDF process particularly during the issue and options discussions in the formulation of core strategies and other LDDs, again drawing out the distinction between the different sectors.
- 9.12 Success in raising the profile of the Solent as the centre for marine sector excellence will, at least in part, be dependent on the scope for the PUSH and other relevant authorities to pursue a single common strategy accompanied by consistent, cross boundary planning and economic development policies.
- 9.13 The marine industry itself can also take action to improve its public image and to review its own communication networks with a view to strengthening its voice and ability to communicate effectively with public agencies and LPAs. Marine industry must also look beyond the UK market and benchmark with Europe and beyond to stay competitive in the global market.

Safeguarding Marine Sites

Recommendation 3

- 9.14 ***Strategic marine sites of existing national and regional economic importance or with the potential to be of national or regional economic importance should be identified and safeguarded for marine employment use only in relevant Local Development Documents.***
- 9.15 ***Relevant Local Development Documents should identify strategic marine sites of existing or potential local significance and either safeguard them for such use or provide clear policy support for them to be used for such uses. It is suggested that strict policy criteria are set that would need to be met before these locally significant sites could be used for non-marine employment purposes.***
- 9.16 ***Relevant Local Development Documents should also recognise that key marine employment sites may not be limited to those with access to water. During the production of relevant Local Development Documents, authorities should take note of the requirements of marine***

industries in respect of these 'off coast' sites. The SEEDA and marine industries should work with local authorities to identify such requirements. Such needs should be taken into account by local authorities in the identification of land for employment purposes.

Recommendation 4

- 9.17 ***The Port of Southampton is likely to require significant additional land to maintain its long-term competitive advantage in the future (this includes both operational and back-land for servicing and distribution). SEEDA and the PUSH authorities should work together with the Port to identify and safeguard land for future port-related use in Local Development Documents to secure the Port's future as a premier, global port and economic driver within the sub-region.***

Implementation

- 9.18 In our view, a significant threat to the continued competitiveness and growth of marine industry is the shortage of available suitable land to accommodate growth and innovation. Strategic marine sites of existing national and/or regional importance or with such potential should be identified and safeguarded for marine employment uses in relevant individual LDDs.
- 9.19 It is recognised that it is not appropriate for decisions of such magnitude to be left to individual local authorities, although ultimately land allocations will need to be pursued through the development of individual LDDs and will need to withstand vigorous testing. We therefore suggest that SEEDA take the lead, with the assistance of the PUSH and other relevant authorities as necessary, on a coherent and consistent site identification and assessment process to provide a robust local evidence base to feed into the production of relevant Local Development Documents to allow for the safeguarding and protection of sites as recommended above.

Existing marine sites of national or regional significance

- 9.20 Unless there are overriding reasons in individual cases for not so doing, existing marine industry sites of existing national or regional significance should be specifically safeguarded for marine use in relevant Local Development Documents. At least the following existing marine sites are nationally important:
- Operational land occupied by the Port of Southampton ;
 - Sites in established marine leisure use along and around the Lymington, Hamble and Medina Rivers, and capable of remaining in such use;
 - Land associated with the HM Naval Base and Dockyard at Portsmouth;
 - Marchwood Seamounting Centre;
 - Land occupied by the Fawley Oil Refinery and Hamble Oil Terminal.

We anticipate that if the detailed assessment process suggested above in paragraph 9.19 was carried out this list may be extended to include other sites.

Commercial Ports

- 9.21 The Government advocates the preparation of port masterplans. These would be particularly useful for the Port of Southampton and the Commercial Port at Portsmouth and should also be considered for smaller ports. The PUSH and other relevant authorities should aim to work in partnership with the Ports in developing their respective Port masterplans which should then be given due regard in the preparation of Local Development Documents and in the allocation and safeguarding of land for marine uses.
- 9.22 The overall economic significance of the Port of Southampton means that it will be essential to seek to introduce strategic policy support for its sustainable expansion. Consultation on suitable locations could be carried out as part of the process of preparing its masterplan. The identification of sites 'off dock' suitable for port-related uses not requiring direct access to the water (such as distribution centres, empty container storage, port services and repairs) is also likely to be required. Policy EC6 of the Hampshire County Structure Plan which safeguards land for port-related uses at Dibden has been further 'saved' beyond the initial three year period by the Secretary of State.
- 9.23 There is scope for further growth of Portsmouth's commercial port activities and opportunities to forge greater links and association with the neighbouring activities at the Naval Base. Clarification of the needs of the Base may permit this occur. There should be a strong presumption against the loss of waterfront land from MoD use to non-marine activities. SEEDA and the relevant local authority may have a facilitating role to play in this regard and further land allocation may be appropriate.

Marine Leisure

- 9.24 The PUSH and other relevant authorities should consider under taking further micro-studies of the Lymington, Hamble and Medina Rivers, and Portsmouth Harbour to identify specific future land requirements of the marine leisure industry; to ensure that safeguarding and land allocation is appropriately targeted; and that planning policies facilitate innovation and growth.

Marine sites of potential national or regional significance

- 9.25 It is important to begin the task of identifying an appropriate landbank of strategic allocations of land suitable for marine industries. Very few locations have the necessary credentials of access to sufficiently deep water and good land communications. Three general locations with the potential to be of greatest significance out of those identified and where sufficient land might be made available stand out:
- a. Land within the site of HMS Daedalus, in SEEDA's ownership, provided that appropriate water access can be achieved: land access also requires improvement;

- b. Land on the western bank of Southampton Water between Hythe Village Marina and Marchwood Seamounting Centre, including land subject to the criteria identified in saved structure plan policy EC6. This location is nationally significant for its potential to accommodate marine industries as one of a very limited number of sites with access to world shipping routes, and;
- c. Land with water access to the Medina.

9.26 None of these locations is straightforward, and significant environmental and infrastructure constraints would have to be overcome if they were to come forward. However, if they do not come forward, the message of the Study is that the contribution of marine industries to the future economy will be significantly restrained. Constraints to their use by marine industries include international and national nature conservation designations and inadequate access. These issues need to be addressed at regional and national level as well as locally, including the identification of appropriate mitigation and compensation strategies to ensure the maintenance of the integrity of the designated sites. This task is likely to have a lengthy lead time.

9.27 Evidence from SEEDA is that there is a current unmet demand for waterfront sites in their ownership from marine industries. SEEDA will need to maintain a rolling programme and carry out a periodic review of new marine opportunities and sites to ensure that ongoing demand for sites suitable for marine businesses can continue to be met in the future. The Strategic Development Areas proposed for South Hampshire, whilst not on the coast, may be suitable locations for marine industry not requiring access to the water and may also provide much needed land for marine supply chain industries, in particular supporting the Port of Southampton. Where employment land allocated for marine-related uses and linked to other fiscal incentives to ensure that land was affordable to small and medium sized business, there could be an opportunity to facilitate growth and innovation within certain sectors of the marine industry.

9.28 In the longer-term, whilst the outcome of the recent defence review has safeguarded the future of the Naval Base at Portsmouth and the future of other defence sites have recently been secured, should circumstances change, these sites have significant water frontage and are strategically well placed to meet the needs of marine industry in the future. Likewise, should changes in future energy market lead to the availability of land presently occupied by the Fawley Oil refinery, this would also have significant strategic long-term potential. It may be sensible for policies to acknowledge that sites of such strategic significance to marine industry in the long term should be protected from loss to marine uses if circumstances change.

9.29 There is also further work to do to ensure that those sites that are identified fulfil their economic potential. SEEDA will need to give further careful strategic consideration to the list of sites identified with 'potential' to ensure that maximum value is secured for marine industry through their release. For example, at Daedalus further consideration is required of the options and viability of improving access to the waterfront and any enabling development requirements.

Other locally important sites

- 9.30 At the local level, we recommend that individual authorities identify locally significant existing or potential marine sites and provide clear policy support for their use for marine employment uses in the first instance either through site allocation, where appropriate, or the use of a criteria based policy restricting the use to which the site could be used. Local authorities should actively canvass the representative views of key marine cluster businesses as key stakeholders in formulating LDD policies. The specific land use requirements of the three core marine clusters should be assessed and LDD policies framed to meet specific needs.

Skills and Training***Recommendation 5***

- 9.31 ***SEEDA should further co-ordinate existing recruitment and skills programmes, along with identifying where further investment is necessary in the sub-region to address the marine skills base shortage.***

Implementation

- 9.32 There is currently considered to be a critical mass of people with relevant skills in the area and employer led training and coordination of existing skills and competitiveness programmes could maximise benefits and assist in the maintenance of a skills base in the area. We recommend that as an initial step SEEDA initiates the establishment of a marine skills forum with organisations already providing marine skills programmes in the Solent area including MEMSP, the Hampshire and Isle of Wight CoVE, the Regional Resource Centre and the Universities. This should have a practical focus on identifying, and planning provision for emerging skills requirements which firmly reflect market demand. The starting point for this should be a review of sub-regional circumstances relative to the training priorities identified by SEMTA (Sector Skills Council for Science, Engineering and Manufacturing Technologies) in the UK Marine Sector Skills Agreement. Particular consideration should be given to key priorities including:

- Reviewing the effectiveness of existing programmes relative to market needs.
- Ensuring effective mechanisms are put in place for institutions to operate and deliver training programmes in a coherent and integrated manner.
- Identification of measures to mitigate the effect of an ageing workforce, which without targeted efforts, will result not only in a contraction in the available workforce pool but a potentially acute shortage of key skills which are needed particularly for activities which demonstrate growth and diversification opportunities.
- Proactive marketing initiatives to encourage more high quality graduates and other young people into the sector especially with engineering and related qualifications.

- Actively encourage the establishment of more employer-led training initiatives including the pooling of workforce training provision which can benefit a range of marine and non-marine business sectors.
 - Focus on training programmes which are aimed at stimulating productivity gains in the sector. This should include high quality management and leaderships skills and training in lean manufacturing processes.
- 9.33 It will then be appropriate for SEEDA working with partner organisations and employers to provide a coherent marine skills programme and action plan for the Solent area which potentially could be rolled-out to other parts of the South East. This programme should have a sharp focus on demand-led skill requirements which can be adaptable to respond to changing priorities over time. In order to ensure programmes retain a strategic rationale, SEEDA should continue its involvement in the forum including a co-ordinating and monitoring role.
- 9.34 Future investment and funding in recruitment and skills programmes is likely to require a partnership approach between a number of different agencies, training providers and local employers. An investment package and identified funding sources will need to be agreed between the relevant partner organisations with responsibilities for implementation clearly identified.

Addressing the economic/environmental balance

Recommendation 6

- 9.35 ***SEEDA, PUSH and other relevant local authorities working in partnership with Natural England, the Environment Agency and key elements of the principal marine industries should assess the feasibility of creating new habitats on at least a Solent-wide basis as a compensatory measure for the effects of the needed expansion of the marine industry.***

Implementation

- 9.36 SEEDA and local authorities need to take the lead, in partnership with Natural England the Environment Agency and principal marine industries, in addressing the issues raised by the potential effects of the expansion of marine industries on designated and other sensitive coastal environments, particularly in the light of predicted sea-level rise.
- 9.37 A strategy is required, alongside that being developed to compensate for the loss of coastal habitats as a result of coastal protection works, for large scale habitat creation in compensation for development proposals that may have an adverse environmental impact on valuable ecological resources. The strategy should look at adopting a proportionate and practical approach to compensation. The results of this work should result in the insertion of appropriate policies in LDDs, and possibly even the identification of key compensation sites.

Providing Affordable Land and Premises

Recommendation 7

- 9.38 ***SEEDA should emphasise to relevant local authorities the need for affordable land supply for marine uses. SEEDA, PUSH and other relevant local authorities should assess the feasibility of a range of fiscal measures and policy mechanisms to bring forward a supply of affordable employment land suitable for marine industries.***

Implementation

- 9.39 The feasibility of securing affordable employment land for marine industry requires additional evaluation and study. We have identified a lack of affordable expansion or relocation sites or places where new marine industry ventures can be started. The fundamental requirement in making more affordable sites and premises available for marine businesses lies in the ability to agree and implement effective allocation and safeguarding policies such as those described earlier. Strong proactive allocation policies will be most effective if higher value (non-marine and usually non-employment) uses can be prevented from pricing-out small and medium sized businesses.
- 9.40 As previously highlighted where market failure is evident, SEEDA has a key role to play in actively facilitating the provision of land and premises for marine businesses in specified circumstances. Possible intervention measures that SEEDA and its partners could employ in order to make it viable for small and medium sized marine businesses to secure appropriate sites and premises (subject to State Aid rules) include measures such as gap funding, direct development, capital grants, joint ventures or low-cost loans.
- 9.41 Other mechanisms that could be put in place to assist with the provision of affordable premises include the ring-fencing of Section 106 funds from high value developments which may be used to plug the viability gap for some marine uses. Other forms of financial support that potentially could be used to support appropriate forms of economic marine development include the grants and programmes that will be forthcoming through the funding stream associated with the designation of PUSH as a new Growth Point location.

Response to Climate Change and sea level rise

Recommendation 8

- 9.42 ***SEEDA, PUSH and other relevant local authorities, and marine industries themselves should seek to educate relevant bodies and organisations to enable the identification of the potential long-term planning solutions required to address the likely impact of climate change in respect of sea level rise. At the very least it should be made a priority that marine sites of existing or potential national or regional significance are protected from the implications of sea level rise.***

Implementation

- 9.43 Whilst the implications of climate change for the Solent area are now better understood, there is as yet no clear response in spatial and economic policies to sea-level rise.
- 9.44 Over the coming decades, sea level rise is likely to have a significant effect on marine industry, with the potential long-term loss of parts of several sites currently in marine employment use. It is noted that such concerns already exist for example at Chichester and Lymington.
- 9.45 It would be prudent to ensure that future land-use decisions do not prejudice the ability to achieve the managed retreat of marine sites of national or regional significance and to develop policies accordingly to safeguard undeveloped 'backland' where it is possible to do so. Local authorities will also need to have greater regard for the long-term viability of proposals for new marine development on vulnerable sites in reaching determining future applications. An assessment may be required of whether the short and medium term economic advantages of development outweigh long-term risk. A long-term strategy ought to be in place to manage risk where development is permitted, whether flood defence measures, 'backland' availability or relocation opportunities.
- 9.46 Land reclamation may offer an alternative solution but will be more expensive and complex to achieve and may only offer a temporary respite.
- 9.47 There may be no other solution than large scale strategic flood protection schemes paid for by the public purse to safeguard major centres of population such Portsmouth, and to a lesser extent Southampton. Such scheme would help to protect marine industry operating in these areas.
- 9.48 Where marine businesses that do not require a waterfront location are vulnerable to sea-level rise, policies may need to look to re-locate these elsewhere; suitable sites will need to be identified.
- 9.49 There is also the question of how policies will develop in response to the potential loss of habitats, such as mudflats, through climate change. As discussed earlier, erosion of the existing coastline may remove existing environmental constraints to marine industry growth. Alternatively, habitat loss could simply be replaced by new initiatives by way of compensatory measures for habitat creation and re-creation that could continue restrict marine business growth. There is clearly an opportunity for partner organisations to ensure that any future strategy for habitat recreation and/or replacement can be successfully integrated with an economic strategy that facilitates growth of marine industry.
- 9.50 SEEDA should seek to influence the next round of Shoreline Management Plans (SMPs); the North Solent SMP is relevant to the Solent area in this case and work is being led by the New Forest District Council. Although non-statutory documents, SMPs have a much longer horizon than LDDs and are developing options for coastal protection and management including options for managed coastal realignment. SEEDA and PUSH should seek to ensure

that economic priorities and objectives as well as environmental protection and conservation objectives are delivered by the future SMP for North Solent. At the very least protection from the implications of sea level rise should be achieved for the identified marine sites of existing or potential national or regional significance in SMP's and coastal defence strategies.

Simplified, strengthened and more proactive administrative arrangements

Recommendation 9

- 9.51 ***Consideration should be given to the need to refocus support for marine industries. Existing bodies responsible for implementation of the marine planning consent procedures should be encouraged to work jointly to improve co-ordination and streamline and simplify decision-making for marine business.***

Implementation

- 9.52 The existing multiplicity of elected and publicly funded organisations with some responsibilities for the coastal zone and the waters of the Solent is a handicap to the development of positive policies to support marine industries. Currently, there are 13 planning authorities (14 if the regional planning body is included) and seven harbour authorities as well as Natural England, the Environment Agency and DEFRA. The process of policy making and implementation on the coast is hugely complex and opaque, and understandable to very few. It may be further complicated by the introduction of a marine management organisation as proposed by the Government through the Marine Bill, and the proposed setting up of an independent infrastructure commission under the Planning Reform Bill.
- 9.53 It is not for us to suggest a general review of the administration of the Solent, but we note that rationalisation of the decision-making process is required in order to implement the draft proposals of RSS for the sub region. We would see benefit in at least refocusing existing organisations to be to support and promote the Solent as a growth area for marine industries. However, in our view a more radical approach is required. This process could also usefully consider the need to identify a leader and Champion to co-ordinate the case and address the issues we have mentioned in this report, and to do so on a coherent and inclusive basis across the area and for all types of marine industries.

Long term Strategic Planning Requirements for the Solent

Recommendation 10

- 9.54 ***Strategic planning decisions for the Solent should be made in the interests of supporting the growth of marine industries and the organisational structure should be redefined to enable this to happen.***

Implementation

- 9.55 The study has shown that marine industries are embedded in the economic, environmental, transport and land use structure of the Solent, and that they are likely to be a significant source of the improved economic performance that underlies draft RSS's strategy for the sub region. However, there is very little evidence that marine industries' needs are currently understood by policy makers, or confidence that this position will change. Consequently, there is a danger that decisions on a number of matters relating to the development of the sub region area (and adjoining parts of the Isle of Wight, West Sussex and the New Forest that include elements of the Solent marine clusters) will continue to be taken without regard to the needs to encourage marine industries to grow. This would adversely affect the ability of marine industries to compete in a global market and therefore to contribute to the achievement of the aspirations for the local and regional economy.
- 9.56 It is apparent from the desk based analysis, the consultation sessions and the face-to-face interviews, that the implementation of a number of policies have already made it more difficult for some marine industries to thrive, or even to continue to operate. An obvious example is the encouragement for residential or other high value uses, either on waterfront sites that are themselves suitable for marine industries or on sites adjoining such activities.
- 9.57 For local authorities and other decision and policy-making bodies, the issue that arises is how the increased awareness of the need to support and growth marine industry assets should be put into place. It should clearly form one of the foundations for whatever body emerges to implement the sub regional proposals. The evidence of the study is that adjoining parts of the Isle of Wight, and the West Sussex and New Forest Coast should be considered alongside the PUSH area. This is particularly the case with parts of the Isle of Wight, which is a significant centre for marine industries.
- 9.58 We suggest that SEEDA should give further more detailed consideration as to whether a separate body should be established to further marine interests, which would contain its own expert team in association with key business and statutory partners. This has been done elsewhere, for example the Haven Gateway Partnership covers the five Haven ports of Felixstowe, Harwich International, Harwich Navyard, Ipswich and Mistley. Based on their central role as hubs and generators of economic activity, the Haven Gateway Partnership provides a framework within which its partner organisations - from the private and public sectors - can work together to promote economic opportunities and secure the future prosperity of the region. We consider that such a partnership involving all the marine interests of the Solent would be in a strong position to represent them in the planning process.



10. Figures

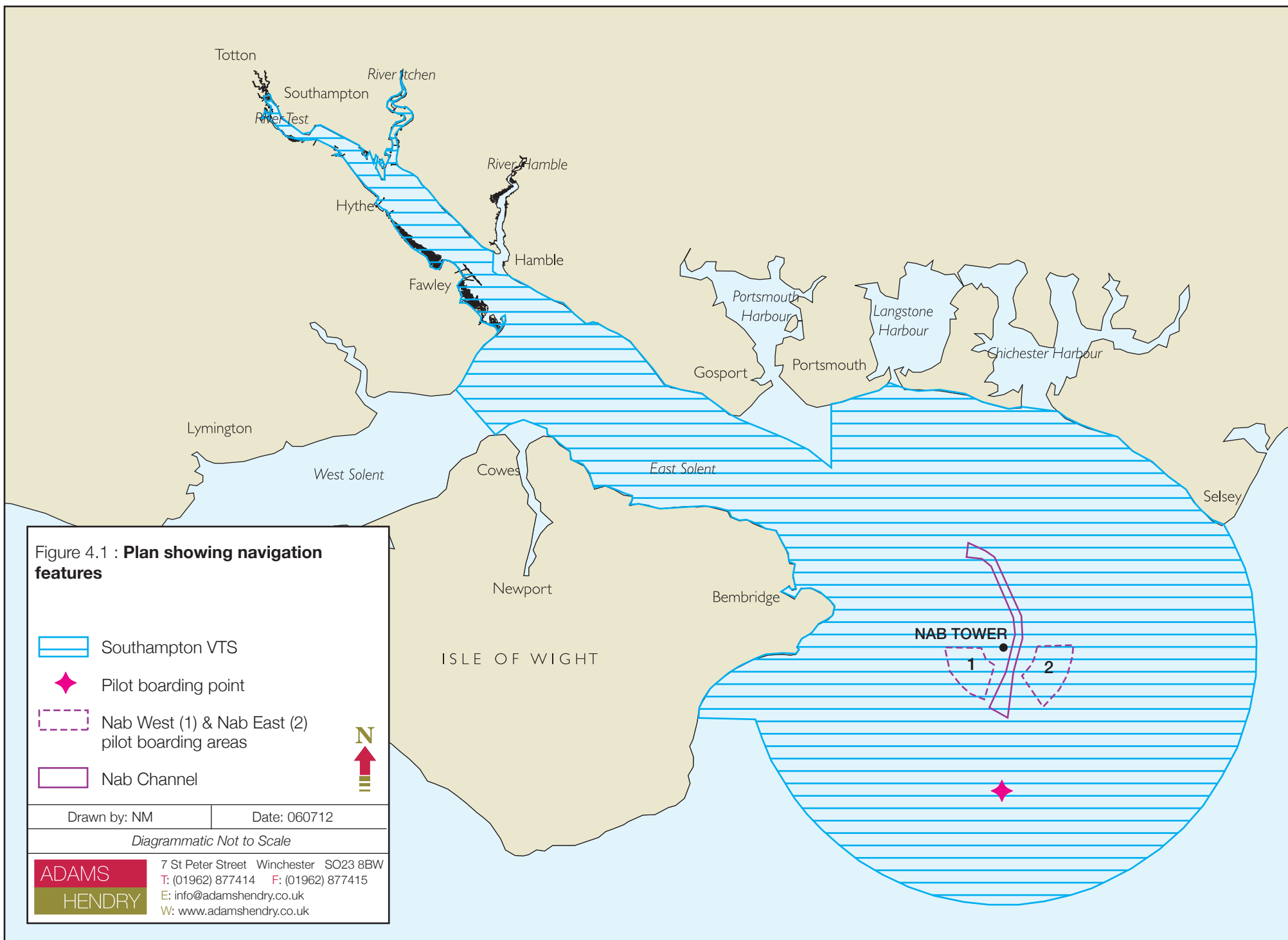
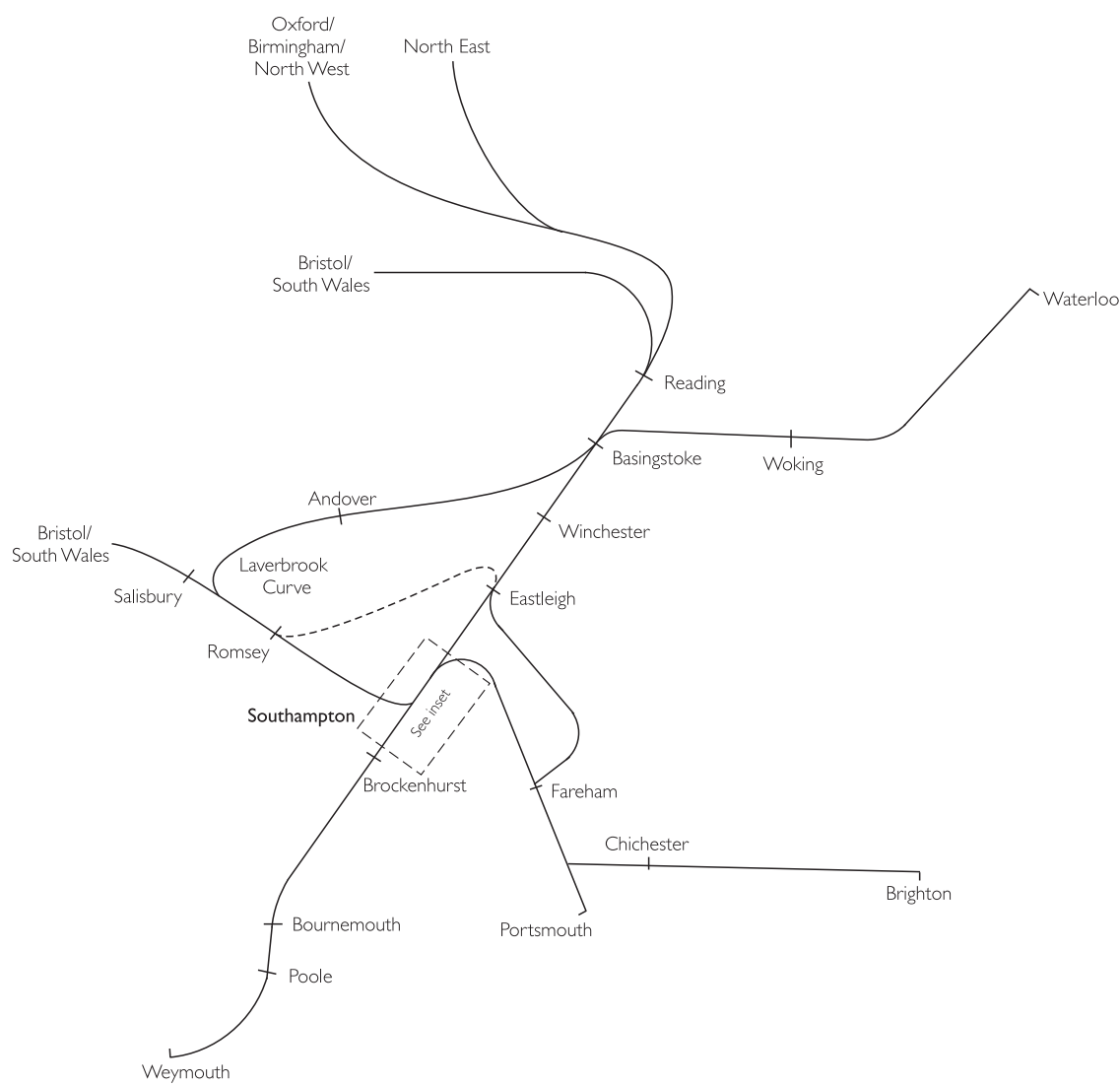


Figure 4.2 : Overview of Railway Network



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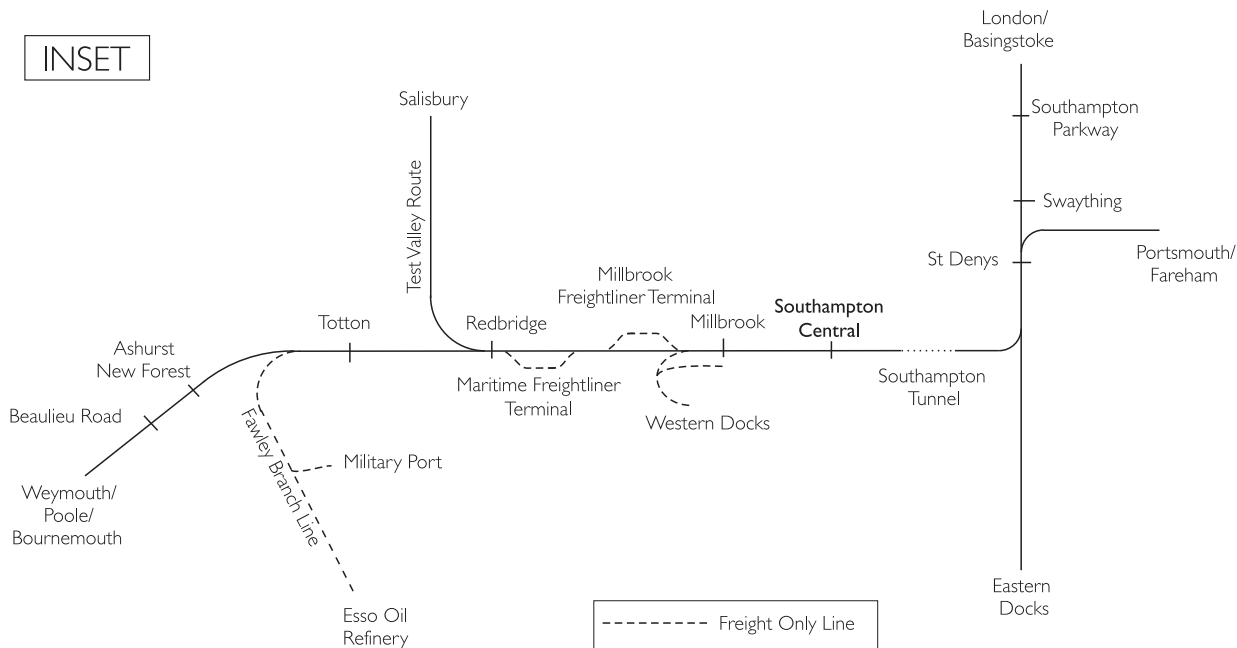




Figure 4.3 : Strategic Marine Sites and overview of Transportation Network



Figure 5.1 : Study areas referred to in Economic Analysis
 Local Authority areas included in the wider 'Solent Districts' area

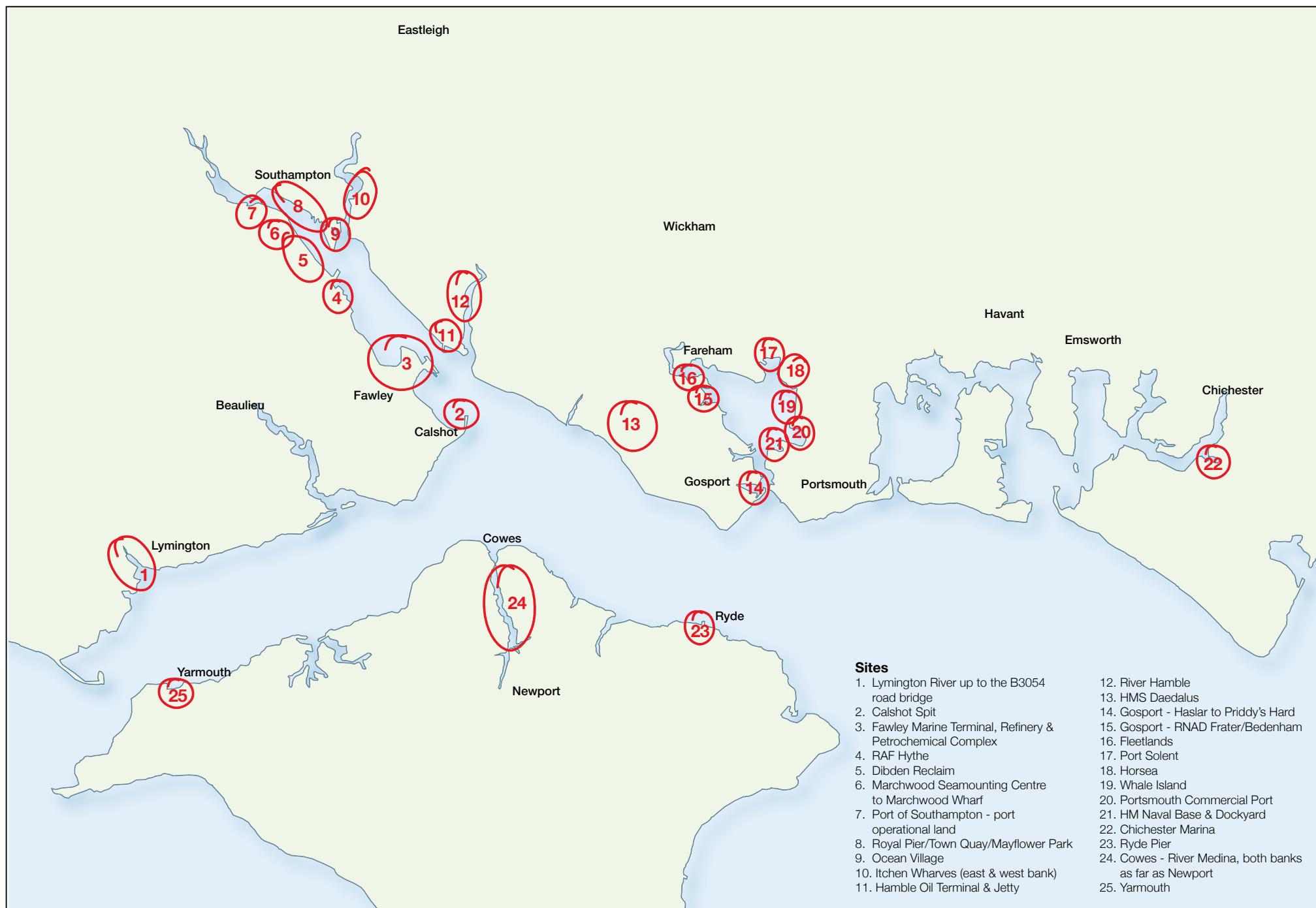


Figure 6.1 : Strategic Marine Sites Location Plan

- Legend**
- Sites
- SPA (Special Protection Areas)*
 - National Nature Reserve*
 - AONB (Area of Outstanding Natural Beauty)*
 - Ramsar*
 - SAC (Special Area of Conservation)*
 - SSSI (Sites of Special Scientific Interest)*
 - National Park*

- *Source: <http://www.magic.gov.uk>
- Sites
1. Lymington River up to the B3054 road bridge
 2. Calshot Spit
 3. Fawley Marine Terminal, Refinery and Petrochemical Complex
 4. RAF Hythe
 5. Olden Reclaim
 6. Marchwood Seamounting Centre to Marchwood Wharf
 7. Port of Southampton - port operational land
 8. Royal Pier/Town Quay/Mayflower Park
 9. Ocean Village
 10. Richey Wharves (east and west bank)
 11. Hamble Oil Terminal and Jetty
 12. River Hamble
 13. HMS Daedalus
 14. Gosport - Harrier to Priddy's Hard
 15. Gosport - RNAD Fraser/Bedham
 16. Fleetlands
 17. Port Solent
 18. Horsea
 19. Whale Island
 20. Portsmouth Commercial Port
 21. HM Naval Base and Dockyard
 22. Chichester Marina
 23. Ryde Pier
 24. Cowes - River Medina, both banks as far as Newport
 25. Yarmouth

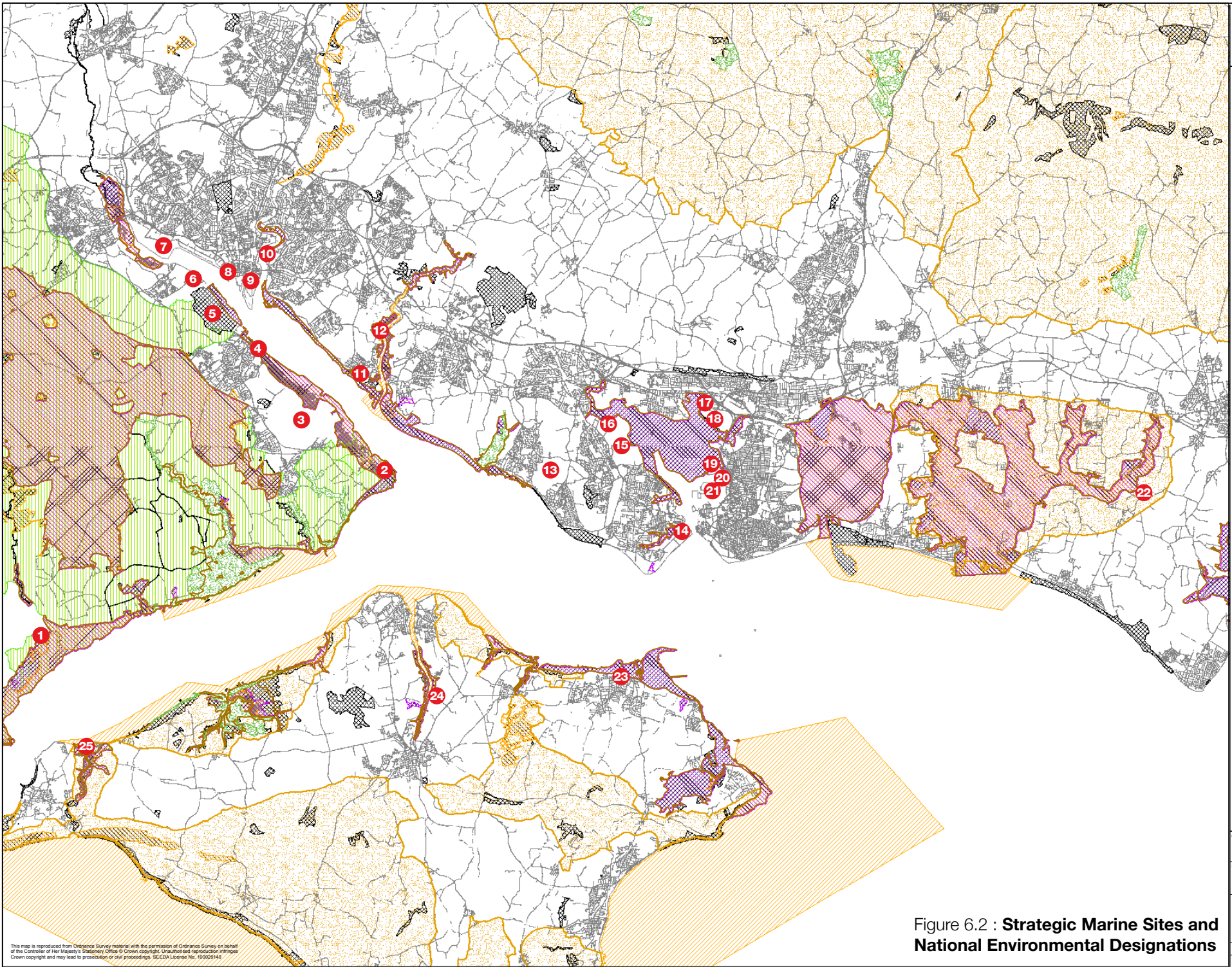


Figure 6.2 : **Strategic Marine Sites and National Environmental Designations**

CLIENT	SEEDA		
PROJECT	Solent Waterfront Strategy		
TITLE	Figure 6.2 Strategic Marine Sites and National Environmental Designations		
SCALE	DATE	DRAWN	
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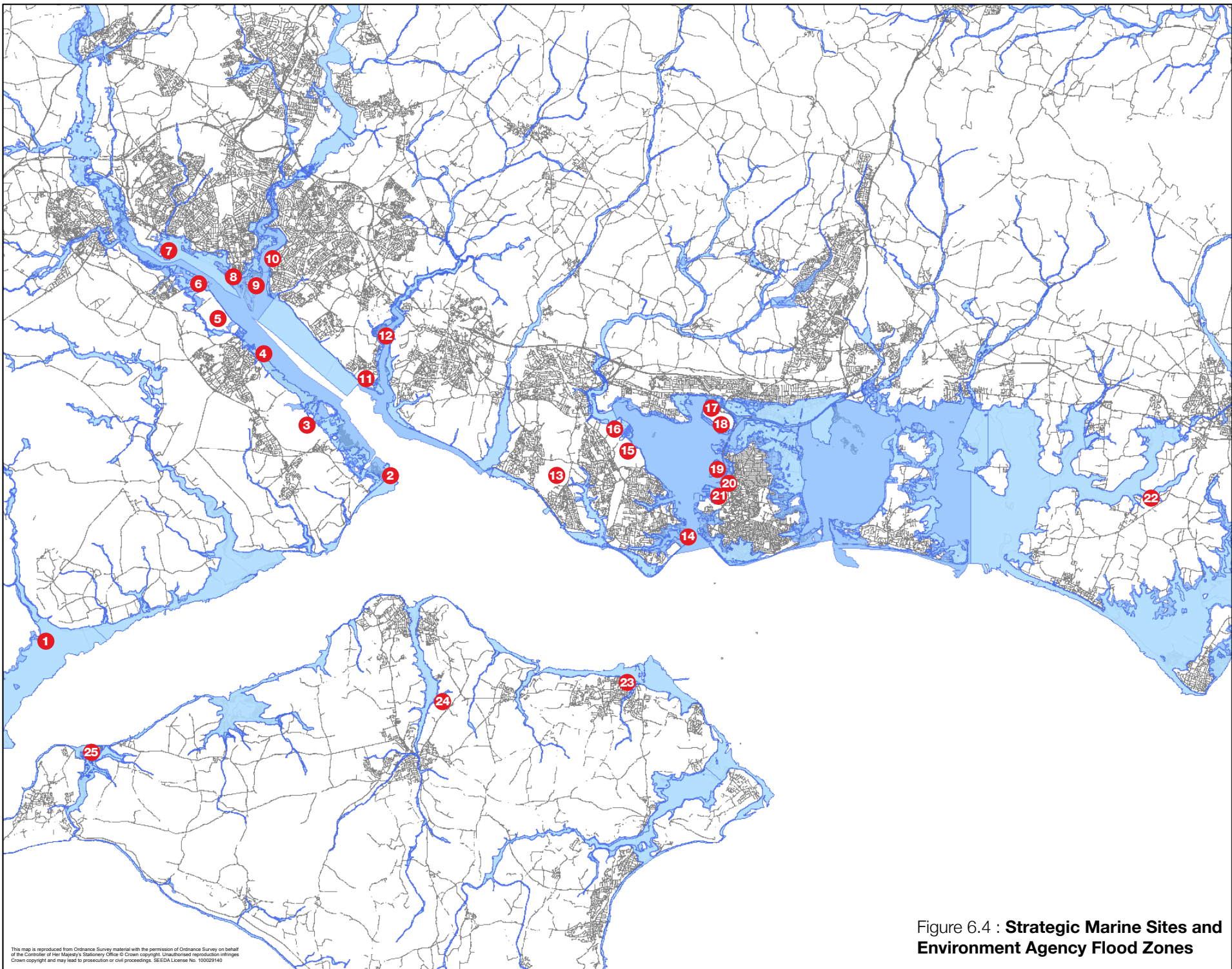
- Legend**
- Sites
 - Strategic Gaps*
 - Conservation Areas*
 - Local Gaps*
 - Local Nature Reserve**
 - SINCs (Sites of Importance for Nature Conservation)*

*Source: Hampshire County Council
 **Source: <http://www.hamp.gov.uk>

- Sites**
1. Lymington River up to the B3054 road bridge
 2. Calshot Spit
 3. Fareley Marine Terminal, Refinery and Petrochemical Complex
 4. RAF Lythe
 5. Dibden Reclaim
 6. Marchwood Seamounting Centre to Marchwood Wharf
 7. Port of Southampton - port operational land
 8. Royal Pier/Town Quay/Mayflower Park
 9. Ocean Village
 10. Itchen Wharves (east and west bank)
 11. Hamble Oil Terminal and Jetty
 12. River Hamble
 13. HMS Daedalus
 14. Gosport - Haslar to Priddy's Hard
 15. Gosport - RNAD Frater/Badenham
 16. Fleetlands
 17. Port Solent
 18. Horsea
 19. Whale Island
 20. Portsmouth Commercial Port
 21. HM Naval Base and Dockyard
 22. Chichester Marina
 23. Ryde Pier
 24. Cowes - River Medina, both banks as far as Newport
 25. Yarmouth

CLIENT	SEEDA		
PROJECT	Solent Waterfront Strategy		
TITLE	Figure 6.3 Strategic Marine Sites and Local Environmental Designations		
SCALE	1:77,164	DATE	04.05.07
at A1		DRAWN	SDH

Figure 6.3 : Strategic Marine Sites and Local Environmental Designations



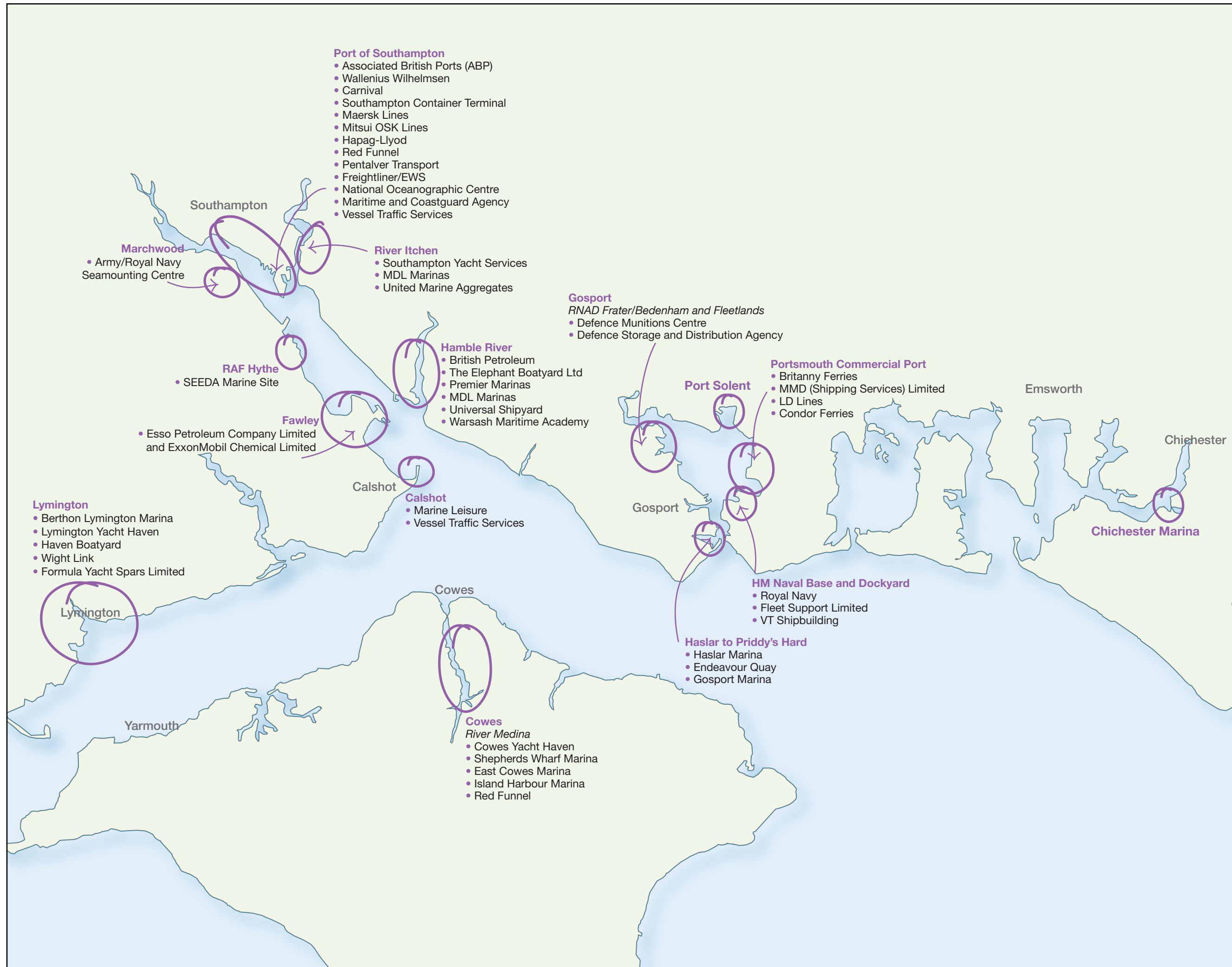
- Legend**
- Sites
- EA Flood Zone 3 - Flooding from rivers or sea without defences
 - EA Flood Zone 2 - Extent of extreme flood
- *Source: Hampshire County Council
- Sites**
1. Lyminster River up to the B3054 road bridge
 2. Calshot Spit
 3. Fareley Marine Terminal, Refinery and Petrochemical Complex
 4. RAF Hythe
 5. Dioden Reclaim
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Figure 6.4 : **Strategic Marine Sites and Environment Agency Flood Zones**

CLIENT		
SEEDA		
PROJECT		
Solent Waterfront Strategy		
TITLE		
Figure 6.4 Strategic Marine Sites and Environment Agency Flood Zones		
SCALE	DATE	DRAWN
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Figure 6.5 :
Major Marine Businesses



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