# South East Marine Sector: Business Issues, Prospects for Clustering

# The Research Report

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for

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April 2003

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#### Thanks are due to

Particular thanks for close collaboration and support
Jonathan Williams, South East Marine Task Force and Marinetech South

In the South East region
Peter Christie, Department of Trade and Industry
Robin Gillum-Webb, SEEDA
lain Shepherd, Marcom and Chair, South East Marine Task Force
George Smith, Chichester District Council
Peter Taylor, SEEDA
Jeff Walters, Southampton City Council
Paul Woodcock, Medway Council
Bob Young, SEEDA,
Members of the South East Marine Task Force

All interviewees and focus group participants (Listed in the appendix.)

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# **Executive summary and policy implications**

#### 1. Introduction: foundation for future cluster strategy

The South East England Development Agency (SEEDA) published its Regional Economic Strategy (RES) in 1999, to provide a vision for the economic and social development of the South East region. An updated version of the RES was published in 2002.

SEEDA has identified a number of significant sectors in the South East regional economy that offer the potential for economic growth and employment. The Agency is exploring the best ways to support these sectors, one of which may be through intelligence-based cluster development strategies. The SEEDA Cluster Fund provides a vehicle for the agency to kick-start practical cluster initiatives for groups of businesses.

Prior research on UK economic clusters by the Department of Trade and Industry suggested that the marine industry plays a notable role in the South East region's advanced engineering industry, and has links to a number of other significant regional industries. SEEDA has recognised the significance of the marine sector as one of nine key priorities in the RES, and has adopted a twin-track strategy to develop an appropriate support framework for the sector:

- 1. establishment of the South East Marine Task Force, which meets regularly to advise SEEDA and also to manage a number of broadly based support projects including awareness-raising and the development of best-practice case studies;
- 2. commissioning of a cluster mapping research project to provide the intelligence foundations for a marine sector cluster action plan.

This report presents the results of the second project. The researchers have worked closely with the Marine Task Force which has actively supported the project.

This research addresses a series of questions relating to the size and scope of the marine sector in the South East, business issues affecting firms in the sector, and the prospects for enhancing business clustering in the sector. The issues are presented in the following chapters.

- 1. Introduction: foundation for future cluster strategy
- 2. The existing knowledge base
- 3. Sector size, scope, and firms
- 4. Geographical clusters
- 5. Business issues
- 6. Developing products and services
- 7. Regional supply chains

- 8. Employment and skills
- 9. Transport and logistics
- 10. The south east region as a location
- 11. The business support context
- 12. Prospects for networking and clustering

The three appendices cover the firms and organisations consulted, the products and services supplied by the firms surveyed, and examples of local inter-firm co-operation in South East marine.

#### 2. Developing the knowledge base

This report develops the existing formal knowledge base represented by the 2001 DTI cluster mapping study findings on South East marine, and the Sea Vision initiative national statistical study of the overall marine sector. To support the work of the South East Marine Task Force, it was necessary to develop foundational knowledge about the size and extent of the marine sector in the South East as well as more focused knowledge about prospects for developing enhanced clustering activities.

We adopted a methodology based on a number of interwoven strands. Each strand took a different 'cut' or 'section' across the sector.

- 1. Company database preparation
- 2. Business survey of 200 firms
- 3. Four local focus groups incorporating forty marine businesses
- 4. Thirty in-depth interviews

Regular discussions over emerging policy implications took place with SEEDA cluster managers and with the SEEDA Marine Task Force. Three presentations of interim research results were made to Task Force meetings and to a conference organised by the Task Force in Chichester (October 2002), and an in-depth presentation of research findings was made to a meeting convened by the Task Force towards the end of the research process.

#### 3. Sector size, scope and firms

The database contains 2,000 firms that supply marine markets. A reasonable conservative estimate of the total number of South East firms that supply marine markets is 4,000, with half of these highly dependent on the sector.

To assess the economic significance of the marine sector in the South East, we focused on employment. Numbers of marine employees is a useful surrogate for economic contribution and dependency as well as being important in its own right.

Our estimate of numbers employed directly in the South East marine sector is 105,000. This figure is a conservative estimate. It is substantially higher than the 21,000 estimated by the DTI cluster mapping study, in part because we have adopted a broader definition of the sector incorporating ports, services, and shipping, in line with the marine sector's own national Sea Vision initiative. The Sea Vision calculation of total UK employment in the marine sector is 254,000. It is not unreasonable to estimate that 40% of UK marine employment is located in the South East region, although confirmation would require comparable studies in other UK regions.

There are at least two policy implications of the sector's size. First, the sector as a whole is significantly larger than is suggested by the DTI cluster mapping study, and this needs to be taken into account from a policy perspective. Second, from a UK-wide perspective, we believe that further comparative study would show the South East to be significantly the most important UK marine region.

The marine sector in the South East spans a wide range of marine market segments. The size of the marine sector in the region in part reflects the significant presence of each of a broad range of marine market segments.

While the largest number of firms supplies leisure marine markets, these tend to be the smaller firms in terms of employment. Taking this into account, the diversity of the sector in the region is even more apparent, with a broad variety of significant marine market segments ranging from leisure marine to ship-building and repair to ports to oil and gas and to maritime services. Many individual firms operate in more than one of these markets.

This diversity represents a strength and a weakness from a policy perspective. On the one hand, the sector is likely to be resilient to market changes and be able to provide firm bases for a broad variety of growth initiatives. On the other hand, the sector is fragmented, and our impression is that few firms recognise just how broad — or how large - the sector is in the South East region. This is therefore likely to present challenges in organising it.

In terms of numbers of firms, the marine sector is dominated by small firms – indeed micro firms of 5 or fewer employees. On the other hand, the data suggest that there is a small number of very significant "pillar firms" which dominate the sector in employment terms. The very small firms are over-represented in the leisure marine segment, whereas the small number of very large firms appears to be concentrated in segments like shipbuilding, oil and gas, and maritime services.

A policy implication of the large number of small firms is that they are likely to suffer from all the management and strategy deficiencies associated with small firms in general. Moreover, the micro firms represent a particular policy challenge, as they may not even be capable (in terms of active management capabilities) of gaining advantage from anything but the least sophisticated networking/clustering activities. When one adds to

this the particular cultural characteristics associated with parts of the leisure marine segment (i.e. lifestyle or craft orientation) the challenges mount.

A policy implication of the existence of a small number of very large firms is the potential value of identifying these key marine firms – individually – with a view to ensuring that they are supported by the SEEDA policy apparatus and incorporated in South East Marine Task Force activities. This is of particular importance given that the survey data tends to reflect the views of the more numerous smaller firms, which, logically, each contribute less to the regional marine economy.

Between these two extremes may lie the larger SMEs and middle market companies that might be expected to have the highest capacity to gain from, and contribute to, networking and clustering activities.

### 4. Geographical clusters

In marine sector policy terms, it is essential that the economic well-being of the core Solent marine geographical cluster is safeguarded, and it is likely to be in this sub-region that any large-scale activities or investments to support the sector are made in future. International recognition of the marine sector in the South East is likely to reflect the Solent region. On the other hand, it is our impression that the true magnitude and breadth of the sector in the Solent region has not been adequately represented either from a regional marketing perspective or by individual firms whose marketing activities could benefit from association with a well-described Solent-branded marine cluster. This may be a reflection of the sector's fragmentation.

The broader distribution of marine firms across the region suggests a policy requirement to better understand the nature of the marine sector in these diverse and distinctive locations, and the nature of the competitiveness challenges faced by firms located in parts of the South East away from the core Solent cluster (see the focus group discussions below of the Medway and Guildford areas).

#### 5. Business issues

The principal conclusion of this analysis is that a very broad range of business issues is considered important by marine sector firms in the South East. Government regulation and skills stand out. Our more detailed analysis of the top perceived business issues helps to identify some of the more specific problems that firms believe need to be addressed. It also reveals some particular challenges from the perspective of organising and implementing policy and cluster initiatives, when it is recalled that the survey reflects industry perceptions.

 The strong perception of over-regulation hints at a scepticism about new initiatives, unless – and we believe this to be unlikely in practice - the South East Marine Task Force can reduce the perceived regulatory burden. The Task Force might nonetheless be able to attract broader interest in its activities by recognising these issues and making some contribution towards addressing them, perhaps in cooperation with the sector's trade associations.

- That the skills issue is generally defined as sheer perceived shortage suggests a market-based perspective towards procuring skilled employees. This is consistent with a set of companies that have not actively participated in developing skilled employees in the past and now confront the fact that however employees were developed in the past the processes are no longer functioning adequately. Many firms may not traditionally have done more than seek skilled employees on the open market, and this suggests that some significant changes in perception may be required if they are to become more responsible for defining and developing the skills they require.
- The emphasis on 'declining markets' as an issue possibly reflects markets where the forward view is short as a number of marine markets are generally expected to grow over the medium term. There may therefore be a reluctance to invest or commit resources due to uncertainty over future market conditions. Equally likely, smaller companies may believe that their markets are declining when in fact their access to them is diminishing (possibly as supply chains restructure). Without robust market analysis, it is easy to confuse falling competitiveness or reduced access with declining markets.
- The focus on foreign competition as an issue of costs underscores the requirement to address, directly or through other strategies, cost-based competition in a number of marine segments.
- The wide variety of public profile issues raised suggests that an intelligent approach
  to public relations activities is required, to reflect and address the substantial
  variations in image-related issues across the sector and ensure that any key issues
  identified by one or more marine segments do reflect the industry as a whole.
- A broad range of site issues was identified, but the survey did not specifically find waterfront access to be widely perceived as a key business issue.

Overall, we are struck by the sheer diversity of business issues perceived by marine firms. This in turn doubtless reflects the sheer breadth of the marine sector as we have defined it. The *quid pro quo* for recognising the size and breadth of the marine sector in the South East region is to broaden out the business issues faced by firms in the sector as a whole. The challenge for the South East Marine Task Force is to avoid a lowest-common-denominator approach if it tries to be 'all things to all firms' within its broad constituency. Part of the solution to this dilemma is likely to be the identification of subgroups possibly organised around three-to-five of the more significant marine segments in the region, possibly linked in turn with their national trade bodies and associations. In this context, our research could act as a useful framework to set initial agendas and working hypotheses rather than have the sub-groups separately develop their own, ultimately incompatible, agendas. Finally, perception issues related to apparent market decline suggest the value of an initiative to develop and make available more sophisticated market intelligence, possibly through some form of *information hub*, than some of the smaller firms may currently have access to.

#### 6. Developing products and services

The survey suggests that only a minority of firms undertakes any product or service related research and development. R&D tends to be concentrated in the more technology oriented marine segments. Only a small minority of firms have active linkages to universities and research institutions in the South East region. In-depth interviews suggest that the way Government is attempting to boost commercialisation at universities and research institutions may be having the opposite effect as far as their clustering linkages to regional firms is concerned.

From a policy perspective, we have only touched on some of the key issues related to the introduction of new products and services – which may of course take place without explicit R&D activities. However, there is sufficient data to raise concerns about both the relatively low levels of linkage to regional research centres, and just as importantly, perceived threats to existing linkages, to suggest that this should be a particular area of concern – and a matter for deeper investigation - for the South East Marine Task Force.

### 7. Regional supply chains

If, as the interviews suggested, many marine supply chains take the form of dynamic networks reformulated for each new project, rather than stable clearly defined and vertically ordered chains, there are some significant policy implications. First, the potential for supplier development activity along supply chains will be restricted to those marine segments where more stable chains can be identified. Ship building and some marine equipment work may have more stable supply chains, for instance. Second, the requirement for, and the value of, knowledge about the capabilities of other marine firms will be at a premium. Many firms, especially the smaller firms, will rely on personal relationships and word of mouth as they put projects together, which will help cement trusting relationships but will deter innovation. This suggests that a relatively simple – if resource intensive - programme to disseminate information about regional firm competencies could be a highly valued activity for the South East Marine Task Force. Not only would firms value it, but it might significantly boost innovation linked to the establishment of new business relationships.

#### 8. Skills and employment

One in three firms surveyed reported that they already had, or anticipated, difficulties recruiting staff. The key areas of concern are skilled manual and professional, technical and scientific skills. Sheer lack of applicants, lack of qualifications, and lack of experience figure most highly as particular problems. There appear to be significant variations by segment in the extent to which firms are experiencing recruitment problems, though the patterns are not entirely unambiguous.

Two in five companies report that they undertake some structured training of their workforces. However, analysis of the type of training undertaken suggests that much of this is the training of new recruits.

Skills and recruitment is clearly an important issue for a significant minority of marine sector firms. As an issue that is susceptible to local and regional policy intervention, this is clearly an area where the South East Marine Task Force may able to take, and to encourage, useful actions to support firms in the sector.

# 9. Transport and logistics

We have only been able to introduce transport and logistics issues in this research. A high proportion of firms report transport and logistics problems, suggesting that this is an area that ought to be followed up. On the other hand, the region's marine sector does benefit from proximity to London and to major international airports; this could prove useful in improving the market profile of the marine sector in the region.

#### 10. The South East as a location

Firms in the South East region face rising pressures on their competitiveness related to rapid economic growth and congestion. Costs are increasingly an important issue, and housing and commuting problems are making the region less attractive to incomers. Here, the South East marine sector is affected by overall economic issues not specific to marine firms.

Currently, at least, the research suggests that the problems of trying to run a marine business in the South East in a high-growth region are relatively unimportant compared with the isolation and skills shortages of some other UK regions. Thus while employment costs may be higher in the South East than other regions, this is compensated by higher productivity levels, lower turnover, and a better work ethic both native to the region and amongst the incomers ambitious enough to move in to the region. However, from a policy perspective it is not difficult to see sections of this industry being undermined by continued economic growth which crowds it out, restricts its expansion, and stifles its competitiveness.

#### 11. The business support context

The most valued forms of business support in principle are employee training and advice on marketing and diversification. However, the overall result masked wide variations in what forms of support are most valued. The British Marine Federation is the relevant organisation with the most members in the South East region. Local Business Links are most used in terms of obtaining the types of business support reviewed in this section.

From a policy perspective, on average, the firms surveyed want most support for employee training, and for marketing, suggesting that these should be prime focuses of

a successful South East Marine Task Force. However, other support initiatives are also likely to find 'takers', at least among smaller numbers of firms.

The prominence of the British Marine Federation as an industry body is a useful reminder of the valuable role that existing trade associations should play in SEEDA policy deliberations; similarly some existing small business support delivery mechanisms are valued by some firms, suggesting that the South East Marine Task Force should continue to work with these as well as the trade bodies to help make them more effective in the South East region.

# 12. Prospects for networking and clustering

The prospects for enhancing clustering in the South East marine sector are good, for a number of reasons. Many companies recognise the existence of what are effectively local marine clusters of complementary firms. A high proportion of firms have network linkages to other local firms. Moreover, the concept of clustering is clearly recognised as a business strategy within the industry, particularly from a property development perspective at controlled waterfront locations - organising space to increase local business interaction at marinas and ports, local shared waterfronts, sub-contracting to some degree. Moreover, there is a strong culture within marine of belonging to the marine sector – or at least marine segments - that enhances the prospects for clustering.

The potential for clustering is enhanced in some places precisely by the absence of previous action; there is latent frustrations about what could be achieved, and there is latent interest in taking action. Moreover, a significant national and regional support framework is in place if it can be mobilised by applying the resources required to leverage it – including the Sea Vision campaign, the national trade associations (British Marine Federation, Society of Maritime Industries, Shipbuilders Ship Repairers Association, Society for Underwater Technologies, Chamber of Shipping, etc.) and the South East Marine Task Force. Finally, the SEEDA Cluster Fund competition has clearly stimulated interest in the cluster concept by legitimising the views of those who already supported it and increasing the understanding of those who did not.

On the other hand, there are a number of hurdles which need to be addressed if the potential for enhanced clustering is to be realised. First, there is a risk that the sheer breadth of the marine segment in some local areas will tend to reduce *real* shared interests to lowest common denominator *basic business issues* – public image, to some extent skills, land use planning, for instance. To move beyond these towards more sophisticated business issues, self-selecting business groupings with narrower focuses may be required. This provides a clear rationale for the business-driven approach of the South East Marine Task Force and also for the establishment of cluster groups around focused activities. Here we can begin to sketch the different roles of the South East Marine Task Force and network and cluster groups.

Second, there is clearly wide variation in the levels of sophistication of business operations across the South East marine segment in terms of strategies to deal with external firms, abilities to collaborate, links to R&D support, etc. The larger technology companies, ports and marinas, for instance, are considerably more sophisticated in their behaviours than the smaller leisure marine firms. Moreover, the culture of 'independence' that is widespread in parts of the leisure marine segment may inhibit collaboration. Here it is important from a policy perspective to offer a mix of opportunities, ranging from ambitious new initiatives for those organisations prepared to get involved to basic training and marketing services for those firms unable or unwilling at least initially? - to join more ambitious projects. It may therefore be necessary to provide significant organisational resources to attract industry interest through 'sharedinterest' networking activities such as profile raising and skills enhancement, much of which is essentially defensive, for current players. At the same time this needs to be balanced against more forward-looking work that can potentially create new high-value activity. An important focus of the latter will be to address the roles of the universities and research institutions where serious concerns have been raised about their commercialisation strategies and their prospects for continuing to act as organisation nodes for companies that have traditionally worked with them.

A related third point is scepticism in some local areas that 'anything will be done', which also suggests a mixed network/cluster approach and will require careful groundwork. In some places the starting point appears to be a low organisational base and there is a risk of what may appear to be painfully slow progress at first before initiatives take off. SEEDA needs to be prepared to engage over the medium-to-long-term — albeit with proper monitoring of progress and prospects - in line with cluster theory.

Fourth, the local focus groups began to unearth something of the business power structures that will need to be reckoned with if they are not to inhibit potentially useful activities: port authority controls over water access, for instance, or large company "lack of support" for independent technology development at suppliers. It will therefore be important to obtain a fair degree of support from the larger marine firms in the region to ensure that there is not a counter-reaction from them, in which clustering policy is viewed simply as support to help small firms compete against, or otherwise challenge, large firms.

Finally, there is the sheer complexity of organisational networking for SEEDA:

- 1. one national campaign (Sea Vision)
- 2. at least five relevant national trade associations
- 3. one regional task force
- 4. potentially, four-six local network and cluster organisations

SEEDA's requirement is the right organisational matrix for the South East Marine Task Force and the different local network and cluster organisations which can also draw on (and support) the national initiatives. In our view simple and attractive divisions of labour that map the national and regional onto strategy, policy or the more generic, and the regional and local onto operations, delivery or tailoring, are likely to provide only an initial cut.

From a resource perspective, if SEEDA wishes to explore and develop marine clusters to their full potential it will wish to invest in the capability to mobilise national and regional resources to support them on a medium-term basis. One model would be to actively support a number of *local networks or clusters* by assigning full-time/half-time cluster organisers on a geographical basis to provide the foundations of local organising. The Cluster Fund would continue to award smaller grants to specific business development schemes. Finally, SEEDA would ensure that the Marine Task Force had sufficient professional and administrative support to drive, support and manage the work of increasingly demanding – the more successful they prove - cluster groups.

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# 1 Introduction: foundation for future cluster strategy

### 1.1 Policy background

The South East England Development Agency (SEEDA) published its Regional Economic Strategy (RES) in 1999, to provide a vision for the economic and social development of the South East region. An updated version of the RES was published in 2002.<sup>1</sup>

SEEDA has identified a number of significant sectors in the South East regional economy that offer the potential for economic growth and employment. The Agency is exploring the best ways to support these sectors, one of which may be through intelligence-based cluster development strategies. The SEEDA Cluster Fund provides a vehicle for the agency to kick-start practical cluster initiatives for groups of businesses.<sup>2</sup>

#### 1.2 SEEDA initiatives focusing on the marine sector

Prior research on UK economic clusters by the Department of Trade and Industry suggested that the marine industry plays a notable role in the South East region's advanced engineering industry, and has links to a number of other significant regional industries.<sup>3</sup> SEEDA has recognised the significance of the marine sector as one of nine key priorities in the RES, and has adopted a twin-track strategy to develop an appropriate support framework for the sector:

- 3. establishment of the South East Marine Task Force, which meets regularly to advise SEEDA and also to manage a number of broadly based support projects including awareness-raising and the development of best-practice case studies;
- 4. commissioning of a cluster mapping research project to provide the intelligence foundations for a marine sector cluster action plan.

This report presents the results of the second project. The researchers have worked closely with the Marine Task Force which has actively supported the project.

#### 1.3 This research report

This research addresses a series of questions relating to the size and scope of the marine sector in the South East, business issues affecting firms in the sector, and the

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<sup>&</sup>lt;sup>1</sup> <u>Regional Economic Strategy for South East England</u>. South East England Development Agency, 2002. See also <u>Regional Economic Strategy Action Plans – Draft in Development South East England Development Agency, December 2002.</u>

<sup>&</sup>lt;sup>2</sup> <u>SEEDA Cluster Fund: Creating Internationally Competitive Businesses</u>. South East England Development Agency, 2002.

<sup>&</sup>lt;sup>3</sup> Trends Business Research (2001) <u>Business Clusters in the UK – A First Assessment</u>. London: Department of Trade and Industry.

prospects for enhancing business clustering in the sector. The issues are presented in the following chapters.

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- 24. Prospects for networking and clustering

The three appendices cover the firms and organisations consulted, the products and services supplied by the firms surveyed, and examples of local inter-firm co-operation in South East marine.

# 2 Developing the knowledge base

#### 2.1 The existing knowledge base

Two recent studies are particularly relevant to our analysis, especially for assessing the size and scope of the marine sector in the South East. These are the Department of Trade and Industry's 2001 UK cluster mapping study and the 2002 Sea Vision initiative statistical analysis led on behalf of the broader marine sector by the Chamber of Shipping.

### 2.1.1 DTI cluster mapping and South East marine

The DTI's 2001 UK cluster mapping study was intended to be a foundation for more comprehensive cluster studies by the Regional Development Agencies. Based on a traditional analysis of official statistics categorised by Standard Industrial Classification (SIC) codes, this exercise identified eleven main clusters and six 'less significant clusters' in the South East.

The marine cluster was identified as one of the latter. It was described as follows:

- 1. about 12% of UK marine technology companies located in the South East
- 2. creates 21,000 jobs in the region
- 3. concentrated in the region's southern counties
- 4. 25% of UK employment in pleasure boat building and repair
- 5. significant manufacture of equipment for marine markets (national industry association well represented in region)
- 6. some production for oil and gas markets, but more for marine including defence
- 7. probable links to the weapons and ammunition industry in the region
- 8. a related industry to the instrumentation cluster<sup>4</sup>

It is not entirely clear how the statistics and analysis were derived, or which SIC codes were incorporated. It appears that the analysis is focused largely on the *production* of marine technologies (rather than their use in ports, shipping and associated services).

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<sup>&</sup>lt;sup>4</sup> Trends Business Research (2001) <u>Business Clusters in the UK – A First Assessment</u>. London: Department of Trade and Industry.

# 2.1.2 The Sea Vision project

During 2002 the Chamber of Shipping led a group of marine-related organisations in moving towards an agreed definition of the broader marine sector, and completed an initial UK statistical analysis based, as far as possible, on compatible statistics with mutually agreed sector definitions. The key results are excerpted below, together with the sector definitions.<sup>5</sup>

Sector	Turnover (£bn)	Value Added (£bn)	Exports (£bn)	Employment
Oil and gas	9.20	N/A	1.40	25,000
Shipping	5.12	2.40	3.29	31,500
Manufacturing	5.20	2.53	0.46	40,600
Ship building	2.54	1.27	0.46	24,000
Marine Equipment	2.66	1.26	N/A	16,600
Maritime services	4.54	1.08	0.95	13,800
Ports	1.69	1.18	N/A	25,000
Defence/Naval	6.66	2.53	0.75	61,500
Leisure Marine	1.61	0.94	0.67	26,378
Other	2.82	1.17	0.75	30,460
Telecommunications	0.50	0.19	N/A	
Research and Development	0.61	0.29	N/A	8,040
New Technologies	0.23	N/A	N/A	
Education and Training	0.14	0.07	N/A	1,100
Ocean Survey	0.10	N/A	N/A	
Safety and Salvage	0.32	0.12	N/A	4,200
Minerals and Aggregates		N/A	N/A	2,000
Fisheries	0.92	0.50	0.75	15,120
TOTAL	36.84	11.83	8.27	254,238

<sup>&</sup>lt;sup>5</sup> We are grateful to John Dowden of the Chamber of Shipping for making the statistical analysis available.

Sector	Definitions
Oil and gas	Maritime services utilised in the exploration, development
_	and exploitation of offshore oil and gas fields.
Shipping	Shipping services utilised in the carriage of goods and
	passengers and the chartering of vessels.
Ship building	Construction and repair of commercial (non-leisure) and
	naval ships and other marine structures.
Marine Equipment	Equipment utilised in commercial (non-leisure) and naval
	ships and other marine structures.
Maritime services	Maritime related business services provided by the 'City'
Ports	Loading, unloading and other handling of marine cargoes
Defence/Naval	Military and civilian operations of the Royal Navy including
	foreign ship sales
Leisure Marine	All leisure (non-cargo and fixed route passenger carrying)
	activities including boat building and equipment provision
	excluded above
Telecommunications	The manufacture, surveying and laying of submarine
	telecommunication cables.
Research and	University, public sector and industry involvement in
Development	maritime R&D
New Technologies	Underwater unmanned vehicles, marine biotechnology and
	marine software
Education and	Marine courses in the higher education sector and
Training	seafarer/offshore industry based training
Ocean Survey	Ocean survey's primarily for hydrographic and extractive
	industry purposes
Safety and Salvage	Public and private sector activities related to maritime
	safety and salvage
Minerals and	Shipping services utilised in the offshore extraction of
Aggregates	minerals and aggregates(other than employment this is all
	covered in shipping above)
Fisheries	Sea finfish and shellfish landings and fish farming activities

As can be seen, the Sea Vision initiative has adopted a broad definition of the marine sector that includes relevant parts of the oil and gas industry, as well as shipping, ports and services, together with the development and manufacture of a wide range of marine products.

### 2.2 Our research methodology

To support the work of the South East Marine Task Force, it was necessary to create foundational knowledge about the size and extent of the marine sector in the South East as well as more focused knowledge about prospects for developing enhanced clustering activities. We therefore adopted a methodology based on four strands. Each strand took

a different 'cut' or 'section' across the South East marine sector to give us multiple perspectives.

- 1. Marine sector company database preparation
- 2. Business conditions and cluster survey of 200 database firms
- 3. Four local focus groups, incorporating forty marine businesses
- 4. Thirty five in-depth interviews

# 2.2.1 Marine sector company database preparation

Preparation of a marine sector company database was determined to be the best 'bottom-up' way to develop a basis for assessing the size and scope of the South East marine sector, simultaneously creating a practically useful research output. Database work drew on a combination of specialist databases associated with marine business representative organisations and Marinetech South, all of which were cross-checked to eliminate duplication, but not, at this stage (see below), cleaned by contacting companies directly.

This database contained 2,368 firms operating across a variety of marine sectors. It is important to note that the database is based on *self-identified* marine sector firms, not all firms that supply marine sector markets (but which may be diversified and not consider themselves marine specialists). The implications of this are discussed below.

# 2.2.2 Business conditions and cluster survey

A business and cluster survey was designed for telephone administration, with the raw database providing the population to be sampled. In addition to the valuable data produced on business conditions and issues, this process also permitted us to check the overall validity of the database instead of cleaning it separately. Direct contact with companies during a survey process designed to elicit 200 responses revealed that 5% of firms did not supply marine markets, and a further 11% could not be contacted at all, figures low enough to suggest that the new database suffices for practical purposes until a more targeted company contact exercise is mounted by the South East Marine Task Force.

The survey was the last part of the empirical research to be undertaken. Partly this was because it required completion of the database development process. Partly too, the survey design was based on issues that arose during the in-depth interview phase. This improved both the relevance of the survey and the language in which it was written.

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<sup>&</sup>lt;sup>6</sup> It was quickly concluded that SIC data could not adequately represent the broader marine sector. We initially attempted a regional breakdown of the Sea Vision data but this involved too much estimation to provide trustworthy outcomes.

# 2.2.3 Local focus groups

Four focus group discussions were organised with local partners in Southampton, Medway, Chichester and Guildford to address local and sub-regional issues. At each, a set of cluster concepts and the interim research results were presented as a means to stimulate discussion of local issues and the relevance of clustering. It was not intended to hold focus groups in every potentially relevant location but to obtain a breadth of perspectives across the South East marine sector. However, it was agreed with local partners in Portsmouth and the Isle of Wight that marine firms had already been consulted recently and the results of these consultations were obtained. The forty focus group participants are listed in Appendix 1.

#### 2.2.4 In-depth interviews

A series of in-depth interviews was conducted including with all current members of the South East Marine Task Force. These revealed key issues in part for these to be fed into the survey design, and also revealed significant qualitative data, including on the 'cultures' of the different segments of the overall marine sector. The thirty five interviewees are listed in Appendix 1.

#### 2.3 Developing the knowledge base: conclusions and policy implications

This report develops the existing formal knowledge base represented by the 2001 DTI cluster mapping study findings on South East marine, and the Sea Vision initiative national statistical study of the overall marine sector. To support the work of the South East Marine Task Force, it was necessary to develop foundational knowledge about the size and extent of the marine sector in the South East as well as more focused knowledge about prospects for developing enhanced clustering activities.

We adopted a methodology based on a number of interwoven strands. Each strand took a different 'cut' or 'section' across the sector.

- 5. Company database preparation
- 6. Business survey of 200 firms
- 7. Four local focus groups incorporating forty marine businesses
- 8. Thirty in-depth interviews

Regular discussions over emerging policy implications took place with SEEDA cluster managers and with the SEEDA Marine Task Force. Three presentations of interim research results were made to Task Force meetings and to a conference organised by the Task Force in Chichester (October 2002), and an in-depth presentation of research findings was made to a meeting convened by the Task Force towards the end of the research process. Participants in the last meeting, most of whom had contributed to the research, are listed in Appendix 1.

# 3 Sector size, scope, and firms

#### 3.1 Size of sector

Estimating the size of the marine sector in the South East region is not straightforward. The SIC code system cannot adequately capture the different market segments of the broad marine sector in a consistent way. Equally, a regional breakdown of the Sea Vision initiative statistics could not be achieved consistently. We therefore adopted a bottom-up methodology based on the company database and key statistics generated during the business and cluster survey process. While this method has its weaknesses we have sufficient knowledge of the quality of the data to know where most of these lie.

#### 3.1.1 Number of firms

Taking into account the proportion of firms surveyed that responded that they did *not* sell products or services to marine markets, and those firms that could not be contacted, the firm database contains almost exactly 2,000 firms.

However, these are not the only relevant firms. These are *self-identified* members of the marine sector. This is important because many other firms may also supply marine markets but identify themselves as belonging to other sectors (if they are broadly diversified, for instance). In this context, the data on dependency on marine markets (see below) is significant. The vast majority of firms in our database are firms that are highly dependent on marine markets. Our comparison of firms in the South East marine database with broad supply chain data on other sectors with which we are familiar (principally aerospace, where a large proportion of suppliers is only partly dependent on the sector) suggests that these marine firms may well represent less than half the firms that sell products and services to marine markets.

A reasonable conservative estimate of the number of South East firms that supply marine markets is therefore 4,000, with half of these highly dependent on the sector.

#### 3.1.2 Employment

To assess the economic significance of the marine sector in the South East, we have focused on employment statistics. Both the employment and business turnover statistics generated in the survey were for the South East site in question (not the whole firm), but the turnover data was reported in bands too broad, at the top end, to produce reliable estimates. Numbers of marine employees is a useful surrogate for economic contribution and regional dependency as well as being important in its own right.

Our estimate of numbers employed directly in the South East marine sector is 105,000. It is important to explain how we arrived at this estimate. Average employment at the 200 firms surveyed is exactly 100. This suggests that there are 200,000 employees in

total at these firms. However, average marine sector sales as a proportion of total turnover is 82%, and if this is translated into employment, then 164,000 jobs are due to marine sector turnover. At this point, an important correction needs to be made. The data reveal that a small number of large firms draws the average employees number up to 100 when most firms are in fact very small. Moreover, these large firms tend to have substantially lower marine dependency than the average, so fewer of their employees can be assumed to be employed on marine work. Taking into account this variation in marine dependency by size of firm, we arrive at the figure of 105,000 South East employees whose jobs are directly due to the broad marine sector.

This figure does not include regional economic multipliers. Moreover, we have not made a further correction, upwards, to add employees at the further estimated 2,000 firms that supply marine markets, as we do not have a basis for doing this, and as the numbers added are likely to be diminishing as the marine dependency of firms reduces. Our number of 105,000 employees is therefore a conservative estimate.

This number is substantially higher than the 21,000 estimated by the DTI cluster mapping study, in part because this study appears to have focused on the production of boats, ships and other marine technologies, whereas we have adopted a broader definition incorporating ports, services, and shipping, in line with the Sea Vision initiative. The Sea Vision estimate of total UK employment in the marine sector is 254,000. While this figure was arrived at by a different methodology, in our view the numbers are not incompatible. Certainly it was repeatedly suggested in our in-depth interviews that the South East is the key UK marine sector region, and whereas other UK marine regions appear to specialise in particular marine segments (Scotland in oil and gas, the North East and North West in ship building and repair, the South West with leisure marine), the South East contains substantial activities in all these segments and more (see below). Accordingly, it is not unreasonable to estimate that 40% of UK marine employment is located in the South East region, although confirmation would require comparable studies in other UK regions.

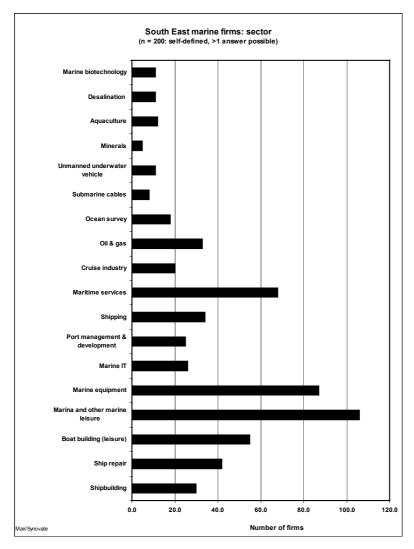
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<sup>&</sup>lt;sup>7</sup> The round numbers are coincidental.

#### 3.2 Sector scope

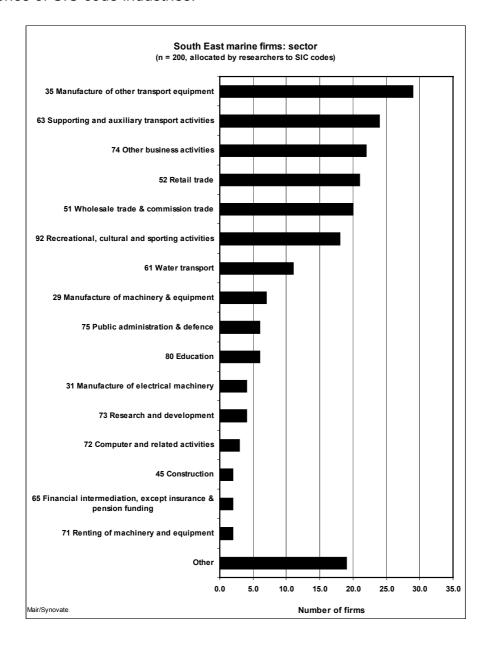
#### 3.2.1 Breadth of marine sector markets served

Marine markets encompass a broad variety of segments. These include the small boat building of the leisure marine segment and ship building and repair. Importantly, they also incorporate all the equipment installed in boats and ships, the ports and shipping, cruise industry and marinas which use ships and boats operationally, a host of specialist marine services, and a variety of underwater technology segments often related to marine and submarine resource management including a significant portion of the oil and gas sector. Our survey permitted respondents to identify any marine market segments which their firm served. The data suggest that in terms of raw numbers of firms participating, the leisure segments, marine equipment, and maritime services are the most significant in the South East. Verbatim survey data on marine products and services supplied by firms is presented in Appendix 1.



# 3.2.2 Breadth of industries selling to marine markets

We undertook a careful classification of companies into Standard Industrial Classification codes, according to the detailed descriptions of the product or service supplied by respondents. This process reveals the breadth of industries - formally classified - that serve marine sector markets. Plainly, marine markets are served by a series of SIC code industries.<sup>8</sup>



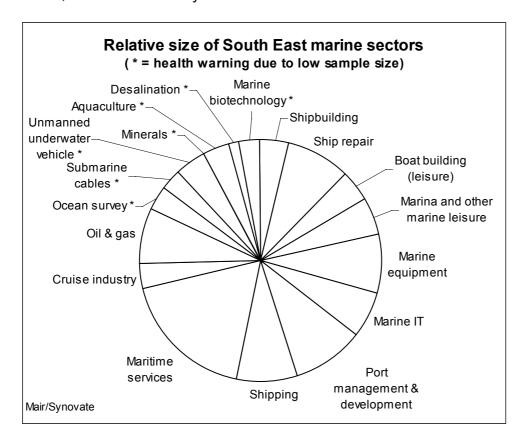
<sup>&</sup>lt;sup>8</sup> This data also illustrates the difficulties inherent in using SIC code data to identify the marine sector.

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# 3.2.3 Relative importance of marine segments in South East

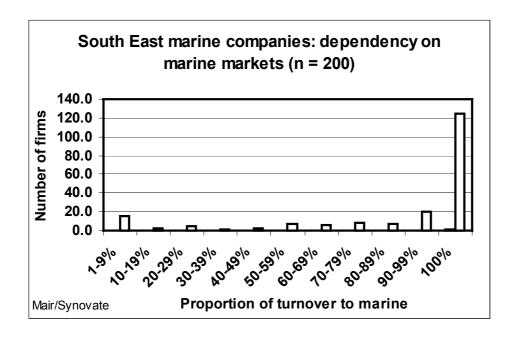
"Number of firms" does not provide a useful estimate of the relative importance of the different marine segments in the South East region, as firms in some segments tend to be significantly larger than firms in other segments. The chart below provides a better impression of the relative importance of different segments. The data behind this chart were calculated on the basis of three survey statistics for each segment: number of firms serving the market, average size of South East site serving the market measured by number of employees, and average dependency on marine markets of firms serving that marine sector.

Two "health warnings" on this data are required. First, some segments (marked with an asterisk) have a low sample size in our study and inclusion of - for instance - one very large firm may exaggerate their significance. Second, the weight of a large marine-dependent firm that is diversified across marine markets may boost the apparent importance of these markets. We believe that these factors may have exaggerated the apparent importance of the underwater and marine resources segments somewhat. Nonetheless, the sheer diversity of the marine sector in the South East is striking.



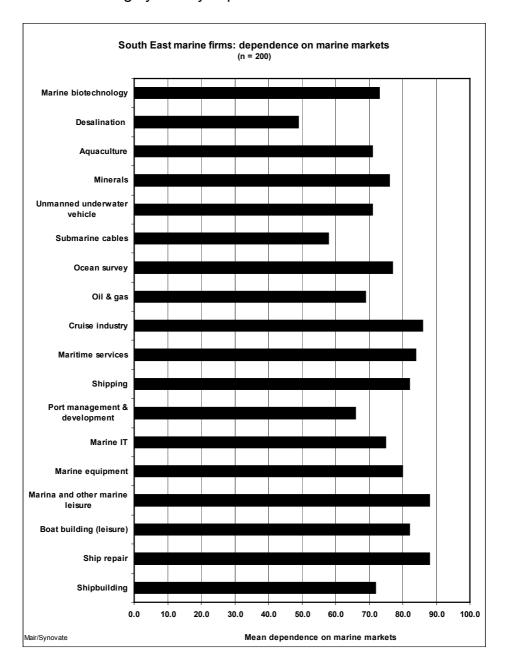
#### 3.2.4 Marine market dependency

The survey results show that six in ten of the marine companies surveyed are entirely dependent on marine markets, with the mean being 82%. The remaining firms have very diverse levels of dependency. It is important to note that our research experience working with databases from other sectors of the economy drawn from entire supply chains suggests that dependency rates are normally far more evenly spread than this South East marine data, averaging 40-50% dependence on the sector in question. We believe that the results obtained from the South East marine survey are likely to be the effect of a database comprised largely of self-identified marine firms which has by definition not incorporated many of the broadly based firms with lower dependency on marine markets which are very likely to be present in the region.



# 3.2.5 Dependency on marine: variation by segment

The in-depth interviews suggested that firms in some marine segments may tend to be more dependent on marine markets than firms in other marine segments. Small boat-building firms, for instance, may be highly dependent on the marine sector. In other cases, particularly for the more technology-oriented marine companies, and project management companies, these may be broadly based technology and management firms which serve – largely or only in part - marine markets.



The survey evidence is not entirely clear. This may in part be an artefact of the low level of variation within the sample firms, most of which are very dependent on marine markets. However, there is suggestive evidence that firms in the more technology-oriented segments are somewhat less dependent on marine markets than are the ship-repairers, cruise companies, or marina companies.

#### 3.2.6 Diversification and inter-industry links

The survey reveals that many marine firms are strongly diversified across market markets within the overall marine sector. For instance, marine equipment, electronics and IT companies may sell products and services designed for marine environments across the marine defence, shipbuilding and boat building markets. Indeed the 200 firms we surveyed operate in an average of 3.0 marine segments.

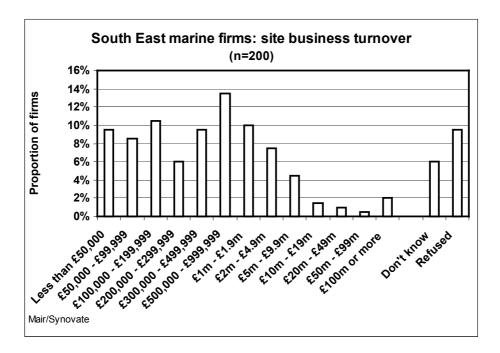
Diversification into non-marine markets was explored in the in-depth interviews. Some firms had diversified out of marine into other markets, while some had diversified into marine from serving other markets. The latter group includes the technology firms that have diversified into marine markets, including underwater technologies, from the oil and gas segment. Diversification is guided by opportunities to apply hard or soft technologies into a group of overlapping markets which includes oil and gas, underwater cabling, underwater vehicles, offshore power systems, and indeed water management inland (e.g. for water utilities).

A second, related case of diversification is that of the project management firms that operate across a series of large-scale turnkey project markets including transport infrastructures, and which reach into marine markets through oil and gas projects and/or ports and container terminals management and support, and/or river and sea defence projects.

### 3.3 The firms

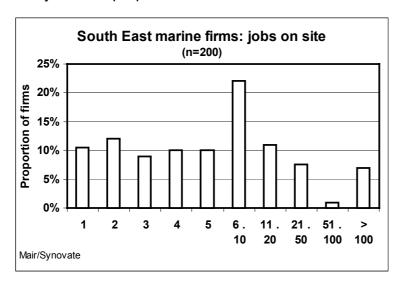
#### 3.3.1 Business turnover

The vast majority of South East marine companies are very small in terms of business turnover. While the data refer to the South East site, not the whole company, it seems likely from their reported size that almost all of these firms are single-site operations rather than headquarters or subsidiaries of larger multi-site groups. If this is the case, then virtually all -95% - of marine sector firms are small and medium-sized enterprises (SMEs) in turnover terms.



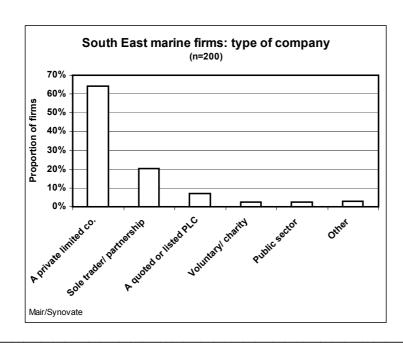
#### 3.3.2 Number of employees

The raw average number of employees at the South East marine firm sites is exactly 100. However, this number reflects the weight of a small group of very large firms. The vast majority of firms employ many fewer than 100, half having five or fewer employees. As discussed above, however, at the larger firms that bring the average up to 100, a significantly smaller proportion of business turnover is due to marine sector business.



#### 3.3.3 Type of company

Most - 85% - South East marine firms are private limited companies, partnerships, or sole traders.



# 3.4 Sector size, scope and firms: conclusions and policy implications

#### 3.4.1 Size

The database contains 2,000 firms that supply marine markets. A reasonable conservative estimate of the total number of South East firms that supply marine markets is 4,000, with half of these highly dependent on the sector.

To assess the economic significance of the marine sector in the South East, we focused on employment. Numbers of marine employees is a useful surrogate for economic contribution and dependency as well as being important in its own right.

Our estimate of numbers employed directly in the South East marine sector is 105,000. This figure is a conservative estimate. It is substantially higher than the 21,000 estimated by the DTI cluster mapping study, in part because we have adopted a broader definition of the sector incorporating ports, services, and shipping, in line with the marine sector's own national Sea Vision initiative. The Sea Vision calculation of total UK employment in the marine sector is 254,000. It is not unreasonable to estimate that 40% of UK marine employment is located in the South East region, although confirmation would require comparable studies in other UK regions.

There are at least two policy implications of the sector's size. First, the sector as a whole is significantly larger than is suggested by the DTI cluster mapping study, and this needs to be taken into account from a policy perspective. Second, from a UK-wide perspective, we believe that further comparative study would show the South East to be significantly the most important UK marine region.

#### 3.4.2 Scope

The marine sector in the South East spans a wide range of marine market segments. The size of the marine sector in the region in part reflects the significant presence of each of a broad range of marine market segments.

While the largest number of firms supplies leisure marine markets, these tend to be the smaller firms in terms of employment. Taking this into account, the diversity of the sector in the region is even more apparent, with a broad variety of significant marine market segments ranging from leisure marine to ship-building and repair to ports to oil and gas and to maritime services. Many individual firms operate in more than one of these markets.

This diversity represents a strength and a weakness from a policy perspective. On the one hand, the sector is likely to be resilient to market changes and be able to provide firm bases for a broad variety of growth initiatives. On the other hand, the sector is fragmented, and our impression is that few firms recognise just how broad — or how

large - the sector is in the South East region. This is therefore likely to present challenges in organising it.

#### 3.4.3 Firms

In terms of numbers of firms, the marine sector is dominated by small firms – indeed micro firms of 5 or fewer employees. On the other hand, the data suggest that there is a small number of very significant "pillar firms" which dominate the sector in employment terms. The very small firms are over-represented in the leisure marine segment, whereas the small number of very large firms appears to be concentrated in segments like shipbuilding, oil and gas, and maritime services.

A policy implication of the large number of small firms is that they are likely to suffer from all the management and strategy deficiencies associated with small firms in general. Moreover, the micro firms represent a particular policy challenge, as they may not even be capable (in terms of active management capabilities) of gaining advantage from anything but the least sophisticated networking/clustering activities. When one adds to this the particular cultural characteristics associated with parts of the leisure marine segment (i.e. lifestyle or craft orientation) the challenges mount.

A policy implication of the existence of a small number of very large firms is the potential value of identifying these key marine firms – individually – with a view to ensuring that they are supported by the SEEDA policy apparatus and incorporated in South East Marine Task Force activities. This is of particular importance given that the survey data tends to reflect the views of the more numerous smaller firms, which, logically, each contribute less to the regional marine economy.

Between these two extremes may lie the larger SMEs and middle market companies that might be expected to have the highest capacity to gain from, and contribute to, networking and clustering activities.

# 4 Geographical clusters

#### 4.1 Marine sector firm locations

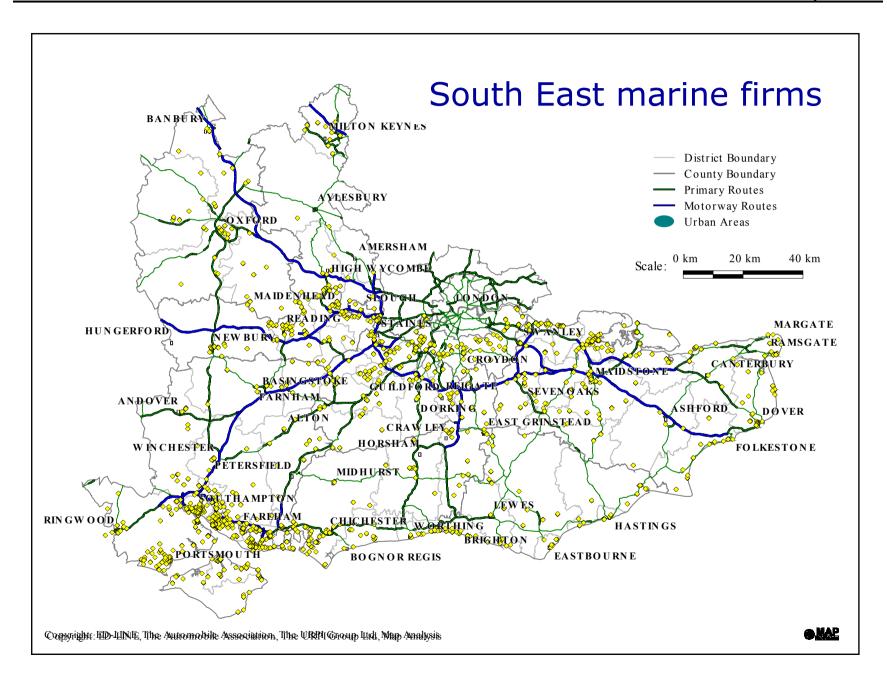
Mapping the database firms reveals that the core geographical concentration of marine sector firms is located across the Solent sub-region around the Southampton-Portsmouth axis. This represents a very significant geographical cluster of firms. In addition to its size, the Solent geographical cluster is characterised by its sheer diversity, ranging from commercial port and naval activities to maritime services, to high technology marine electronics and to a panoply of marine leisure firms dotted around every niche in the coastline (see map overleaf).

Two further features of the marine sector's geography are worthy of note. First, there is a series of smaller geographical clusters around the South East coast, such as at Chichester in Sussex or Medway and the port towns of Kent. Second, the distribution of marine sector firms well inland gives this industry a true regional dimension, notwithstanding the dominance of the Solent region. Detailed database analysis of the products and services of firms suggests that leisure marine activities in the Thames valley, oil and gas/subsea activities in Surrey, and shipping companies south of London and in the M25 corridor are all worthy of distinctive recognition.

#### 4.2 Geographical clusters: conclusions and policy implications

In marine sector policy terms, it is essential that the economic well-being of the core Solent marine geographical cluster is safeguarded, and it is likely to be in this sub-region that any large-scale activities or investments to support the sector are made in future. International recognition of the marine sector in the South East is likely to reflect the Solent region. On the other hand, it is our impression that the true magnitude and breadth of the sector in the Solent region has not been adequately represented either from a regional marketing perspective or by individual firms whose marketing activities could benefit from association with a well-described Solent-branded marine cluster. This may be a reflection of the sector's fragmentation.

The broader distribution of marine firms across the region suggests a policy requirement to better understand the nature of the marine sector in these diverse and distinctive locations, and the nature of the competitiveness challenges faced by firms located in parts of the South East away from the core Solent cluster (see the focus group discussions below of the Medway and Guildford areas).

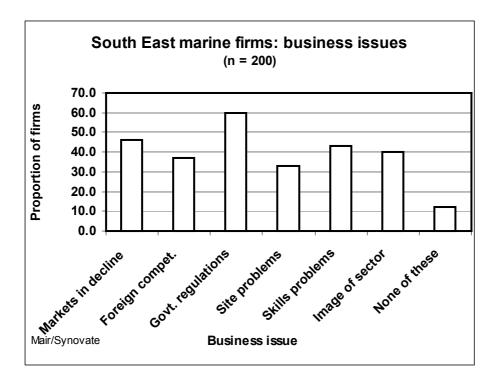


#### 5 Business issues

What issues are perceived by marine businesses in the South East to affect their competitiveness? How do these vary by marine segment? The survey permits us to weigh the relative perceived importance of a number of business issues that may be susceptible to policy intervention.

#### 5.1 Identifying the key business issues

A wide range of issues is perceived to be significant by a substantial proportion of South East marine firms. One third or more of firms consider market issues (declining markets, foreign competition), regulatory issues, more regional/local issues (site and skills problems) and the image of the sector to be significant.



A number of other issues were specifically identified as significant by a smaller proportion of firms.

Other issues of concern	Proportion of firms (n=200)
Environmental issues	5.0
The economy/stock markets	3.5
Competition/competing with other organisations	3.5
Government/Local Authority legislation/regulations	3.0
Tax/VAT/National Insurance/custom and excise duties	3.0
Planning issues/regulations	2.0
The cost of operations/rising costs (eg. fuel/labour/distribution costs)	2.0
Currency/the strength of the pound/exchange rates	1.5
The cost of insurance/increased insurance premiums	1.5
European/EU legislation/regulations	1.5
Health and safety regulations/inspections	1.0
Traffic/congestion	1.0
War/Iraq/the middle east situation	1.0
Rates/port charges	1.0
Other	8.5
Don't know	1.0
None	67.5

Firms that reported an issue to be one of their 'top three issues' were asked to explain their concerns in greater detail.

### 5.1.1 Government regulation

Government regulation was most frequently mentioned as a 'top three issue'. Here there is a clear sense of an industry that believes itself simply to be over-regulated – and probably just wants to be permitted to 'get on with business'.

Government regulation	% of firms (n=89)
The cost of implementing regulations/they are expensive to comply with - time/training/new equipment/resources needed to implement regulations	
Issues with/concerns about health and safety regulations/legislation	21.3
Too much red tape/bureaucracy/paperwork/administration	20.2
Too many regulations/much legislation/the volume of	20.2
Regulations are too stringent/restrictive	10.1
Issues with/concerns about European/EU legislation/directives	10.1
They are a burden on businesses/too much for small businesses	9.0

Issues with/concerns about environmental regulations/legislation	7.9
It is difficult to keep up with new legislation/regulations/ lack of information/publicity on new regulations	5.6
Issues with/concerns about employment regulations/legislation	5.6
They make us un-competitive/we get out-priced by competitors/have to compete with other countries where regulations are not adhered to	3.4
They are not stringent enough/there should be extra licensing/more to help with conservation/environmental issues	3.4
Tax/VAT issues/concerns	3.4
legislation/regulations being introduced/we are over regulated	3.4
Legislation is/regulations are made unnecessarily/for the sake of it/as a knee jerk reaction to events/disasters	3.4
Issues with/concerns about export regulations/legislation	3.4
We have had to stop some of our operations/cancel projects because they did not comply with new regulations/it was not worthwhile to continue	2.2
Regulations/legislation are unclear/difficult to interpret	2.2
Issues with/concerns about training regulations/legislation	2.2
Issues with/concerns about licensing of boats/yachts	2.2
Other	12.4

### 5.1.2 Skills

Skills was the second most mentioned 'top three issue'. Here, closer analysis suggests that firms perceive that the skilled or qualified potential employees they require are simply unavailable.

Skills	% of firms (n=71)
Shortage/lack of skilled staff/people with the skills we require	43.7
Shortage/lack of trained/qualified staff/people	19.7
Lack of young people coming into our industry/young people are not	18.3
attracted to our industry/ageing workforce	
Difficulty recruiting staff/lack of applicants/difficulty finding the right	14.1
staff	
Shortage/lack of experienced staff/people	11.3
We have to take on inexperienced staff/train in house	8.5
Difficulty filling certain positions/vacancies/replacing certain staff	8.5
Lack of training programmes/apprenticeships available	7.0
Poor quality/calibre of staff/applicants	5.6
Low wages/difficulty attracting people to work for the wages we offer	4.2
Legislation/regulations mean the need for additional training	4.2

Lack of government funding	4.2
Shortage of graduates in our industry	2.8
Our industry/sector has a poor/negative image	1.4

### 5.1.3 Declining markets

Declining markets was the third most mentioned 'top three issue'. Here, the key focus is on reduced consumer demand due to short-term economic conditions.

Declining markets	% of firms (n=68)
Customers/clients are spending less/have smaller budgets/less money to spend	26.5
Poor economic climate/possible recession/the state of stock markets	25.0
There is a general decline/recession in our industry/sector	16.2
Lack of demand for our products/services	11.8
Customers/contacts going abroad/foreign competition	7.4
Lack of fish/fishing quotas	5.9
The threat of war/terrorism	4.4
A decline in other industries affects us/if they are in decline it has a knock on effect on us	2.9
Other	16.2
Don't know/no particular issues or concerns	5.9

### 5.1.4 Overseas competition

Foreign competition was the fourth most mentioned 'top three issue'. The key perceived problem is low-cost competition from overseas.

Foreign competition	% of firms (n=53)	
Cheaper price of goods/products from foreign countries/cheap imports/ foreign companies undercutting us	26.4	
Cheaper costs abroad – labour/transport/general overheads	20.8	
Increased competition from abroad/foreign companies taking our customers/having to compete with foreign competitors	17.0	
We are a global company competing in the global market	11.3	
The exchange rates/strength of the pound/competing with the Euro	9.4	
Foreign companies receiving government subsidies/funding/support	9.4	
Don't know/no particular issues or concerns	7.5	
High costs in the UK – tax/labour etc.	5.7	
Lack of government support in the UK	3.8	

Government legislation/red tape - foreign competitors have less red tape/ regulations to adhere to	3.8
Other	7.5

### 5.1.5 Public image

Public image of the sector was the fifth most mentioned 'top three issue'. A variety of specific issues were raised by respondents. Some believed that sector's profile was already good, while others argued for a variety of reasons that the sector's image needed to be improved – it seems likely from the specific comments made that these differences reflect the different marine segments.

Public image of sector	% of firms
	(n=43)
We need to maintain our good/fairly good image	18.6
Our sector is seen as expensive/elitist/for the wealthy	18.6
We have a bad/negative image because of accidents/the image	16.3
does not reflect safety records/our safety measures	
Our sector receives negative press/media coverage	16.3
Manufacturing/engineering has a poor general image	16.3
There is a lack of understanding of what we do	14.0
Our sector is not high profile/publicised enough - We need to promote ourselves/our sector more/increase publicity/have a higher profile	
Our sector is perceived as not being environmentally friendly	9.3
Our activities are considered dangerous	7.0
Our industry is a cottage industry	4.7
Other	14.0
Don't know/no particular issues or concerns	2.3

#### 5.1.6 Site use

Site use was the sixth most mentioned 'top three issue'. A number of more specific problems were mentioned, ranging from planning restrictions to access (possibly waterfront access) and competing land uses.

Site/land use	% of firms (n=42)
Getting planning permission/planning restrictions	26.2
Access problems/restricted access to certain areas	23.8
Local developments/planned housing/commercial developments	16.7

The cost of land/property/lack of affordable sites	14.3
Environmental concerns/issues	14.3
Regulations/red tape	9.5
Protected land/buildings – conservation sites/listed buildings	9.5
Lack of help from the local authority	9.5
Old buildings/the need for modernisation	7.1
Flooding/flood defences	4.8
Other	7.1

### 5.2 Key issues by marine segment and company type

The breakdown of marine issues by segment, as set out in the following tables, reveals that while government regulation and skills issues are fairly constant across segments, other issues are perceived to affect some segments more than others. Thus site issues tend to affect marinas and minerals companies. Foreign competition appears to affect shipbuilding more than ship repair, ports more than leisure marine, all the sub-sea segments but less so maritime services, and so on. And public image appears to concern more the smaller segments such as the sub-marine technology segments or marine biotechnology.

Similarly, small private companies appear somewhat more concerned over public image, although there is little other obvious difference in key issues by company type.

Table: Top three issues by segment (part 1)

	Total	Ship building	Ship repair	Boat building (leisure)	Marina/ Leisure	Marine equipment	Marine IT	Port manage/ develop	Shipping	Maritime services	Cruise Industry
Total	200		42	55	106	87	26	25	34		20
Government	89	10	22	23	<del>55</del>	39		10	12		10
regulations	44.50%	33.30%	<mark>52.40%</mark>	41.80%	51.90%	44.80%		40.00%	35.30%		50.00%
Skills problems	71	<mark>14</mark>	<mark>18</mark>	27	33	29	10	15	<mark>17</mark>	32	8
·	<mark>35.50%</mark>	<mark>46.70%</mark>	<mark>42.90%</mark>	<mark>49.10%</mark>	<mark>31.10%</mark>	33.30%	38.50%	60.00%	50.00%	<mark>47.10%</mark>	40.00%
Markets in decline	68	<mark>13</mark>	<mark>17</mark>	16	31	<mark>33</mark>	6	7	<mark>16</mark>	25	9
	34.00%	43.30%	<mark>40.50%</mark>	29.10%	<mark>29.20%</mark>	<mark>37.90%</mark>	23.10%	28.00%	<mark>47.10%</mark>	36.80%	45.00%
Foreign competition	53	<mark>14</mark>	10	17	20	30	<mark>12</mark>	8	<mark>16</mark>	17	9
	26.50%	46.70%	23.80%	30.90%	18.90%	34.50%	<mark>46.20%</mark>	32.00%	<mark>47.10%</mark>	25.00%	45.00%
The public image of	43	10	12	14	28	20	7	6	6	17	5
your sector	21.50%	33.30%	28.60%	25.50%	26.40%	23.00%	26.90%	24.00%	17.60%	25.00%	25.00%
Land and site use	42	3	9	11	<mark>31</mark>	22	6	6	5	17	3
problems	21.00%	10.00%	21.40%	20.00%	<mark>29.20%</mark>	25.30%	23.10%	24.00%	14.70%	25.00%	15.00%
Other	57	11	15	<mark>20</mark>	28	25	7	5	11	23	7
	28.50%	36.70%	35.70%	<mark>36.40%</mark>	26.40%	28.70%	26.90%	20.00%	32.40%	33.80%	35.00%
Don't know	2	0	0	1	2	1	1	0	0	1	0
	1.00%	0.00%	0.00%	1.80%	1.90%	1.10%	3.80%	0.00%	0.00%	1.50%	0.00%

Table: Top three issues by segment (part 2)

	Oil & Gas	Ocean survey	Sub- marine cables	Unmanned under water vehicles	Minerals	Aqua- culture	Desal- ination	Biotech
Total	33	18	8	11	5	12	11	11
Government	<mark>13</mark>	<mark>7</mark>	2	<mark>5</mark>	2	3	2	1
regulations	<mark>39.40%</mark>	<mark>38.90%</mark>	25.00%	<mark>45.50%</mark>	<mark>40.00%</mark>	25.00%	18.20%	9.10%
Skills problems	<mark>15</mark>	<mark>11</mark>	5	<mark>6</mark>	3	<mark>5</mark>	<mark>6</mark>	<mark>7</mark>
	<mark>45.50%</mark>	<mark>61.10%</mark>	<mark>62.50%</mark>	<mark>54.50%</mark>	60.00%	41.70%	<mark>54.50%</mark>	63.60%
Markets in decline	11	6	2	3	0	3	<u>5</u>	3
	33.30%	33.30%	25.00%	27.30%	0.00%	25.00%	<mark>45.50%</mark>	27.30%
Foreign competition	<mark>16</mark>	9	4	<mark>6</mark>	2	6	4	<mark>5</mark>
	48.50%	<mark>50.00%</mark>	<del>5</del> 0.00%	<mark>54.50%</mark>	<mark>40.00%</mark>	50.00%	<mark>36.40%</mark>	<b>45.50%</b>
The public image of	8	5	3	<u>5</u>	1	5	2	<mark>5</mark>
your sector	24.20%	27.80%	<mark>37.50%</mark>	<mark>45.50%</mark>	20.00%	<mark>41.70%</mark>	18.20%	45.50%
Land and site use	3	1	0	0	2	1	1	1
problems	9.10%	5.60%	0.00%	0.00%	40.00%	8.30%	9.10%	9.10%
Other	8	<mark>7</mark>	1	4	0	3	0	3
	24.20%	<mark>38.90%</mark>	12.50%	36.40%	0.00%	25.00%	0.00%	27.30%
Don't know	1	1	0	0	0	1	1	1
	3.00%	5.60%	0.00%	0.00%	0.00%	8.30%	9.10%	9.10%

Table: Top three issues by company type (part 1)

		COMPANY TYPE			COMPANY SIZE (EMPLOYMENT)					
	Total			Sole trader/ partner ship	Other	1	2-5	6-20	21-100	100+
Total	200	128	14	41	16	21	82	66	17	14
Government	<mark>89</mark>	<mark>55</mark>	7	<mark>20</mark>	<mark>7</mark>	<mark>11</mark>	<mark>39</mark>	<mark>26</mark>	8	5
regulations	<mark>44.50%</mark>	<mark>43.00%</mark>	<mark>50.00%</mark>	<mark>48.80%</mark>	<mark>43.80%</mark>	<mark>52.40%</mark>	<mark>47.60%</mark>	<mark>39.40%</mark>	<mark>47.10%</mark>	35.70%
Skills problems	<mark>71</mark>	<mark>46</mark>	4	<mark>12</mark>	9	<mark>7</mark>	22	<mark>30</mark>	6	6
	35.50%	<mark>35.90%</mark>	28.60%	29.30%	<mark>56.30%</mark>	33.30%	26.80%	<mark>45.50%</mark>	<mark>35.30%</mark>	<mark>42.90%</mark>
Markets in decline	<mark>68</mark>	<mark>42</mark>	6	<mark>15</mark>	4	<mark>7</mark>	<mark>25</mark>	<mark>26</mark>	5	<mark>5</mark>
	<mark>34.00%</mark>	<mark>32.80%</mark>	<mark>42.90%</mark>	<mark>36.60%</mark>	25.00%	<mark>33.30%</mark>	30.50%	<mark>39.40%</mark>	<mark>29.40%</mark>	<mark>35.70%</mark>
Foreign competition	53	41	5	4	3	1	18	25	5	4
	26.50%	32.00%	<mark>35.70%</mark>	9.80%	18.80%	4.80%	22.00%	37.90%	<mark>29.40%</mark>	28.60%
The public image of	43	24	1	<mark>12</mark>	5	<mark>7</mark>	15	14	3	4
your sector	21.50%	18.80%	7.10%	<mark>29.30%</mark>	31.30%	<mark>33.30%</mark>	18.30%	21.20%	17.60%	28.60%
Land and site use	42	27	3	11	1	3	18	15	3	3
problems	21.00%	21.10%	21.40%	26.80%	6.30%	14.30%	22.00%	22.70%	17.60%	21.40%
Other	57	40	2	8	7	5	<mark>24</mark>	18	<mark>5</mark>	5
	28.50%	31.30%	14.30%	19.50%	43.80%	23.80%	<mark>29.30%</mark>	27.30%	<mark>29.40%</mark>	35.70%
Don't know	2	1	0	0	1	0	0	1	0	1
	1.00%	0.80%	0.00%	0.00%	6.30%	0.00%	0.00%	1.50%	0.00%	7.10%

# Table: Top three issues by company type (part 2)

	COMPANY TURNOVER				% OF SALES TO MARINE					
	Under £1m	£1-2m	£2-5m	£5-20m	£20m+	1-10%	11-50%	51-80%	81-99%	100%
Total	115	20	15	12	7	18	16	19	23	124
Government	<mark>54</mark>	6	9	3	5	<mark>7</mark>	4	7	9	<mark>62</mark>
regulations	<mark>47.00%</mark>	30.00%	60.00%	25.00%	<mark>71.40%</mark>	38.90%	25.00%	36.80%	39.10%	<mark>50.00%</mark>
Skills problems	<mark>43</mark>	<mark>7</mark>	<mark>6</mark>	2	3	8	6	8	8	<mark>41</mark>
	<mark>37.40%</mark>	<mark>35.00%</mark>	<mark>40.00%</mark>	16.70%	<mark>42.90%</mark>	<mark>44.40%</mark>	<mark>37.50%</mark>	42.10%	<mark>34.80%</mark>	<mark>33.10%</mark>
Markets in decline	<mark>34</mark>	5	5	4	3	<mark>7</mark>	<u>5</u>	6	8	<mark>42</mark>
	<mark>29.60%</mark>	25.00%	33.30%	<mark>33.30%</mark>	<mark>42.90%</mark>	<mark>38.90%</mark>	<mark>31.30%</mark>	31.60%	<mark>34.80%</mark>	<mark>33.90%</mark>
Foreign competition	26	7	9	4	3	7	5	8	4	29
	22.60%	<mark>35.00%</mark>	<mark>60.00%</mark>	33.30%	42.90%	38.90%	31.30%	<mark>42.10%</mark>	17.40%	23.40%
The public image of	19	4	3	2	2	4	3	4	5	27
your sector	16.50%	20.00%	20.00%	16.70%	28.60%	22.20%	18.80%	21.10%	21.70%	21.80%
Land and site use	26	5	0	4	2	1	5	3	5	28
problems	22.60%	25.00%	0.00%	<mark>33.30%</mark>	28.60%	5.60%	<mark>31.30%</mark>	15.80%	21.70%	22.60%
Other	31	8	3	5	2	4	4	5	6	38
	27.00%	<mark>40.00%</mark>	20.00%	<mark>41.70%</mark>	28.60%	22.20%	25.00%	26.30%	26.10%	30.60%
Don't know	1	0	1	0	0	1	1	0	0	0
	0.90%	0.00%	6.70%	0.00%	0.00%	5.60%	6.30%	0.00%	0.00%	0.00%

#### 5.3 Business issues: conclusions and policy implications

The principal conclusion of this analysis is that a very broad range of business issues is considered important by marine sector firms in the South East. Government regulation and skills stand out. Our more detailed analysis of the top perceived business issues helps to identify some of the more specific problems that firms believe need to be addressed. It also reveals some particular challenges from the perspective of organising and implementing policy and cluster initiatives, when it is recalled that the survey reflects industry perceptions.

- The strong perception of over-regulation hints at a scepticism about new initiatives, unless and we believe this to be unlikely in practice the South East Marine Task Force can reduce the perceived regulatory burden. The Task Force might nonetheless be able to attract broader interest in its activities by recognising these issues and making some contribution towards addressing them, perhaps in cooperation with the sector's trade associations.
- That the skills issue is generally defined as sheer perceived shortage suggests a market-based perspective towards procuring skilled employees. This is consistent with a set of companies that have not actively participated in developing skilled employees in the past and now confront the fact that however employees were developed in the past the processes are no longer functioning adequately. Many firms may not traditionally have done more than seek skilled employees on the open market, and this suggests that some significant changes in perception may be required if they are to become more responsible for defining and developing the skills they require.
- The emphasis on 'declining markets' as an issue possibly reflects markets where the forward view is short as a number of marine markets are generally expected to grow over the medium term. There may therefore be a reluctance to invest or commit resources due to uncertainty over future market conditions. Equally likely, smaller companies may believe that their markets are declining when in fact their access to them is diminishing (possibly as supply chains restructure). Without robust market analysis, it is easy to confuse falling competitiveness or reduced access with declining markets.
- The focus on foreign competition as an issue of costs underscores the requirement to address, directly or through other strategies, cost-based competition in a number of marine segments.
- The wide variety of public profile issues raised suggests that an intelligent approach
  to public relations activities is required, to reflect and address the substantial
  variations in image-related issues across the sector and ensure that any key issues
  identified by one or more marine segments do reflect the industry as a whole.
- A broad range of site issues was identified, but the survey did not specifically find waterfront access to be widely perceived as a key business issue.

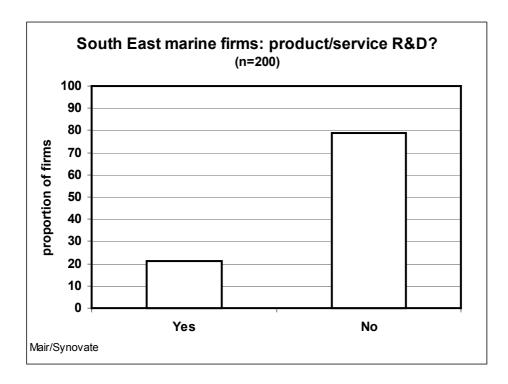
Overall, we are struck by the sheer diversity of business issues perceived by marine firms. This in turn doubtless reflects the sheer breadth of the marine sector as we have defined it. The *quid pro quo* for recognising the size and breadth of the marine sector in the South East region is to broaden out the business issues faced by firms in the sector as a whole. The challenge for the South East Marine Task Force is to avoid a lowest-common-denominator approach if it tries to be 'all things to all firms' within its broad constituency. Part of the solution to this dilemma is likely to be the identification of subgroups possibly organised around three-to-five of the more significant marine segments in the region, possibly linked in turn with their national trade bodies and associations. In this context, our research could act as a useful framework to set initial agendas and working hypotheses rather than have the sub-groups separately develop their own, ultimately incompatible, agendas. Finally, perception issues related to apparent market decline suggest the value of an initiative to develop and make available more sophisticated market intelligence, possibly through some form of *information hub*, than some of the smaller firms may currently have access to.

## 6 Developing products and services

The development of new products and services can be crucial to competitive success. For some firms a prerequisite for this is some form of research and development. Our survey produced some relevant data on this question, which was also addressed in indepth interviews.

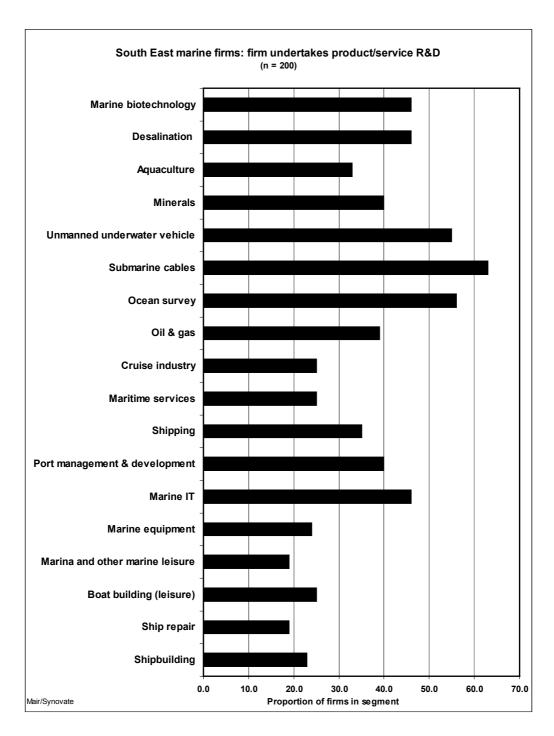
### 6.1 Proportion of firms undertaking R&D

Only one in five South East marine firms report that their organisation undertakes product or service research and development.



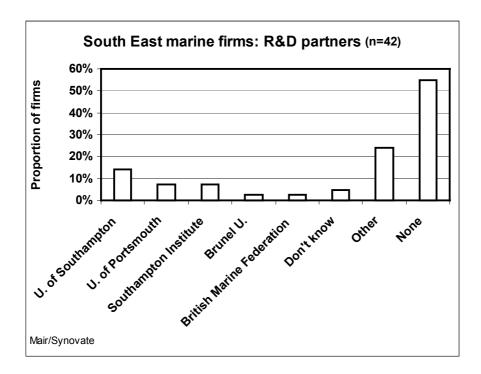
### 6.2 Significant differences between segments

A higher proportion of firms that undertake R&D is to be found in segments such as biotechnology, underwater technology, and information technology. Fewer firms in the ship building and repair, boat building and marina segments undertake R&D.



#### 6.3 Links to regional research organisations

Of the one in five firms that report undertaking R&D, less than half do so with linkages to universities or research institutions. The Universities of Southampton and Portsmouth, and Southampton Institute, are mentioned most frequently, though the overall numbers are low.



#### 6.4 Concerns over regional research centres

The in-depth research interviews revealed that those firms which have more developed active R&D activities value networks with larger firms, smaller firms, universities, research institutions and government departments. These linkages can be anywhere in the UK or globally, though there appear to be a fair number of linkages to the University of Southampton and QinetiQ. These were the two research-related institutions repeatedly mentioned as advantageous to have located in the region.

However, a number of concerns were expressed in the interviews about the value of links to regional universities and research organisations, concerns which suggest that their role as network nodes is currently perceived to be under considerable threat.

The university sector – across the UK - is said to suffer from one of three problems which makes it increasingly difficult to co-operate with them. The University of

Southampton, which is recognised as an important centre of marine technology research, is said to suffer from all three of these.

- In many cases university cultures and priorities are believed to conflict with business requirements, with too much emphasis placed on academic outputs or the attraction of government research funds. These are said to govern the behaviour of academics with which firms would otherwise seek to co-operate.
- In other cases, the commercial imperatives given to universities are forcing them to commercialise their scientific advances themselves, often creating low-cost competition for the private sector rather than supporting it
- Commercial imperatives are also making the universities guarded about releasing details about their commercially relevant research that previously would have been made widely available, just in case it may in future be commercially viable. Moreover, their lack of experience in this area makes them over-cautious.

Regarding research organisations, the future of QinetiQ was discussed by several interviewees.

- On the one hand, the South East is perceived to be well placed as a result of the location of QinetiQ facilities at Farnborough and Haslar. Several marine technology firms have traditionally had relationships with one or both of these facilities. Some regard the presence of marine testing facilities operated by QinetiQ as a major advantage to their South East location. Those companies that are seeking to differentiate themselves through technology e.g. greater use of software and integration have viewed QinetiQ as a key source of military-derived technology.
- On the other hand, these firms observe relationships changing for the worse. QinetiQ's emerging role both as an agent of the government and a private sector competitor is leading to a loss of trust with industry generally. QinetiQ's new commercial role is already restricting the flow of funds. The culture of the organisation is now said to be restricting effective technology transfer. QinetiQ is increasingly subject to severe cost cutting pressures complemented by a lack of true commercial focus, leading to damaging and naïve commercial decisions such as over-pricing testing supposedly to cover costs and therefore losing a wide range of business.
- There are similar concerns about how the development of MOD/DSTL's Towers of Excellence will impact upon technology-related marine companies.

#### 6.5 Developing products and services: conclusions and policy implications

The survey suggests that only a minority of firms undertakes any product or service related research and development. R&D tends to be concentrated in the more technology oriented marine segments. Only a small minority of firms have active linkages to universities and research institutions in the South East region. In-depth interviews suggest that the way Government is attempting to boost commercialisation at

universities and research institutions may be having the opposite effect as far as their clustering linkages to regional firms is concerned.

From a policy perspective, we have only touched on some of the key issues related to the introduction of new products and services – which may of course take place without explicit R&D activities. However, there is sufficient data to raise concerns about both the relatively low levels of linkage to regional research centres, and just as importantly, perceived threats to existing linkages, to suggest that this should be a particular area of concern – and a matter for deeper investigation - for the South East Marine Task Force.

## 7 Regional supply chains

### 7.1 The shape of supply chains

To what extent is it possible to identify a network of regional and local supply chains within the marine sector? The clear consensus from the in-depth interviews was that it is not possible to identify a finite number of *cluster driver supply chains* in the South East marine sector - supply chains that strongly influence the dynamics of the overall sector in the region. Accordingly, we did not utilise the survey instrument to try to map out such key supply chains.

According to interviewees, supply chains in the marine sector tend to be fragmented, network-like, and unstable in the sense of constantly being recreated for each new project. This does mean that many firms find that they have networks of customers, competitors, collaborators and/or suppliers in the South East region. The shapes of these relationships vary very much by marine segment and we have not found it possible to make any general statements that could be considered widely valid. The following examples are indicative.

- In one marine segment, much of the equipment comes from overseas, but the best users of the equipment are a community of companies in the South East.
- In another segment most manufacturing work is subcontracted to local companies.
- In a third segment, a good concentration of high tech companies is located in the region, and geographical proximity is helpful during the development stage.
- In the same segment, another firm reports that it is increasingly using local suppliers
  wherever possible as this helps the company to maintain a focus on high levels of
  customer service. There are said to be good local sources for machined parts in
  stainless steel.
- In a further segment, supply chains stretch from four European countries to East Asia with up to 90% of work contracted out.

#### 7.2 Regional supply chains: conclusions and policy implications

If, as the interviews suggested, many marine supply chains take the form of dynamic networks reformulated for each new project, rather than stable clearly defined and vertically ordered chains, there are some significant policy implications. First, the potential for supplier development activity along supply chains will be restricted to those marine segments where more stable chains can be identified. Ship building and some marine equipment work may have more stable supply chains, for instance. Second, the requirement for, and the value of, knowledge about the capabilities of other marine firms will be at a premium. Many firms, especially the smaller firms, will rely on personal relationships and word of mouth as they put projects together, which will help cement trusting relationships but will deter innovation. This suggests that a relatively simple – if resource intensive – programme to disseminate information about regional firm

competencies could be a highly valued activity for the South East Marine Task Force. Not only would firms value it, but it might significantly boost innovation linked to the establishment of new business relationships.

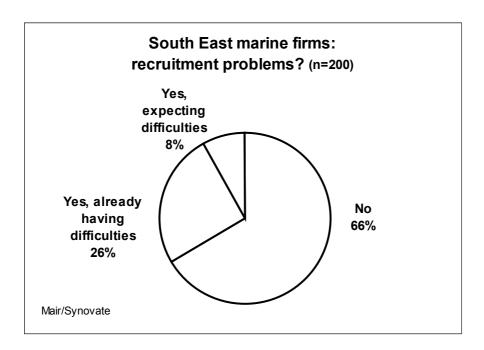
## 8 Employment and skills

#### 8.1 Is there a skills shortage?

The in-depth interviews did not suggest that South East marine firms face a significant problem in recruiting the appropriate calibre of staff. Even turnover for high-calibre staff was reported as not particularly high. The quality of applicants is generally viewed as high. The South East as a whole was said to generate a vast pool of relevant and accessible management talent, for instance, many of whom become available through the constant churn of redundancy and reorganisation in a high-growth region of the UK economy.

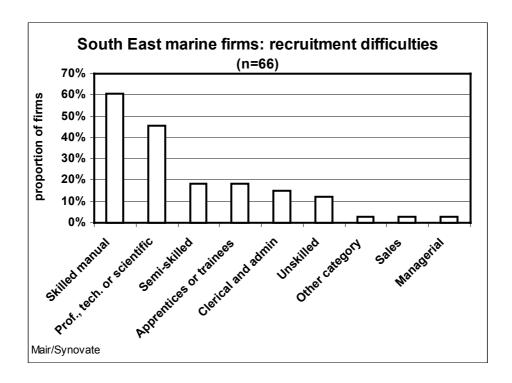
However, the company survey suggested that a broad base of firms does experience skills shortages. Two in five firms rated skills a significant problem, and that one in three rated it as a top-three concern. Moreover, the in-depth interviews certainly revealed a number of specific skills shortages – from marine designers to project planners to operator apprentices.

Asked specifically about recruitment problems, one in three firms reported that they already had, or anticipated, difficulties recruiting staff.



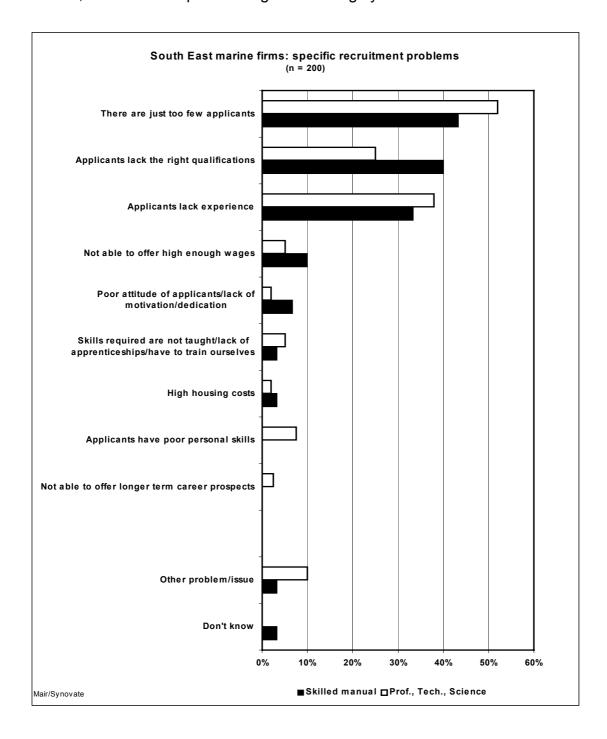
### 8.2 Skills in short supply

The survey suggests that for firms that face significant recruitment problems, the key areas of concern are skilled manual and professional, technical and scientific skills.



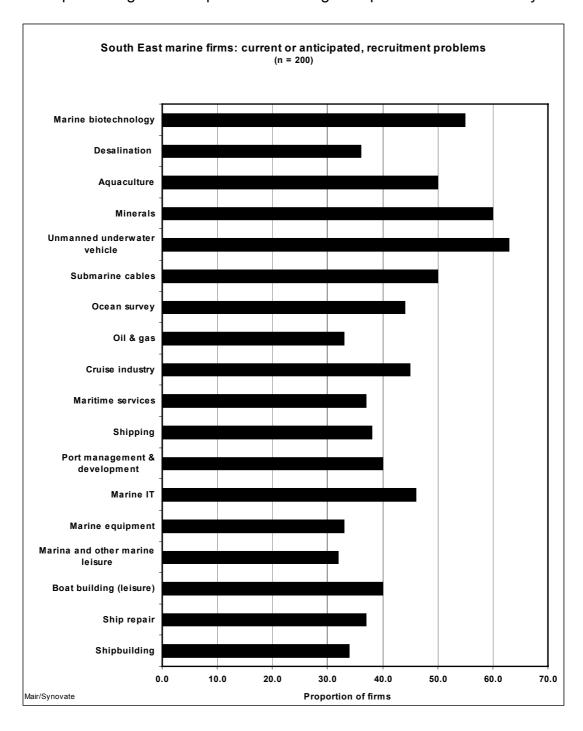
## 8.3 Specific recruitment problems

Drilling down further into these two skills areas, firms with significant recruitment difficulties report the following specific problems. Sheer lack of applicants, lack of qualifications, and lack of experience figure most highly.



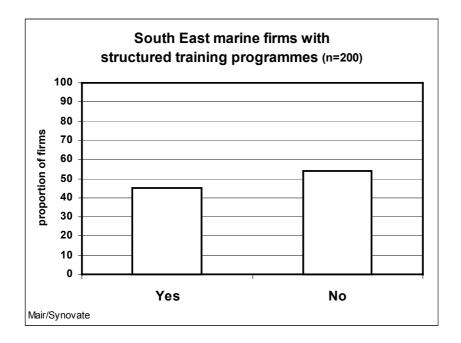
### 8.4 Variations by segment

There appear to be significant variations by segment in the extent to which firms are experiencing recruitment problems, with some of the 'higher technology' marine segments experiencing the most problems – though the patterns are not entirely clear.

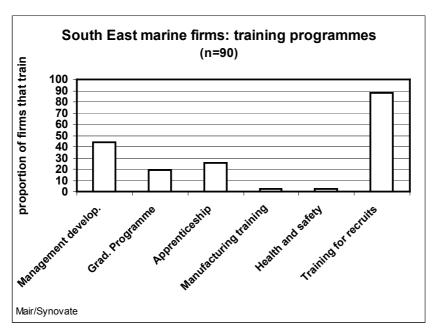


### 8.5 Training programmes

Two in five companies report that they undertake some structured training of their workforces.



However, analysis of the type of training given suggests that much of it is training for new recruits rather than more intensive activity.



### 8.6 Links to training providers

Of the firms that report undertaking structured training, the following training providers are reported to offer support.

Training provider	% of firms (n=90)
Southampton Institute	6.7
University of Southampton	5.6
Southampton City College	4.4
University of Portsmouth	3.3
Highbury College	3.3
British Marine Federation	3.3
VT training	2.2
University of Greenwich	2.2
South Downs College	2.2
Royal Yacht Association	2.2
Crawley College	2.2
Chichester College Arts, Science and Technology	2.2
Don't know	10.0
Other	35.3
None	40.0

The 'other' category included the following (verbatim) reported training organisations.

- A local chemical firm.
- A local trade course.
- Abingdon College
- Andover college.
- Association of Brokers and Yacht Salesmen ABYS.
- BIFA
- · Blackpool and Fylde College.
- Brockenhurst College
- Brunel University
- City College.
- East Grinstead College in Crawley.
- Employers Engineering Federation.
- Havant College
- Isle of Wight Training Group.
- ITE corporate training and recruitment.
- Leicester training centre our company's own national training centre for staff training.

- Lyme Regis boat building college and training, arranged through the British Marine Federation.
- Marine exportation partners.
- Maritime College Warsash.
- National Sea Training College.
- North West Kent College
- Plymouth College and University.
- Portsmouth College
- Salisbury College.
- South Bank University
- South Tyneside College.
- Southampton Technical College.
- Thanet College
- The Southampton Training Centre at Calshot.
- Tidworth college.
- Totton Sixth Form College
- Tyneside Maritime.
- University College Chichester
- University of Brighton
- University of Reading
- YBDSA Yacht Brokers, Designers and Surveyors Association.

#### 8.7 Skills and employment: conclusions and policy implications

One in three firms surveyed reported that they already had, or anticipated, difficulties recruiting staff. The key areas of concern are skilled manual and professional, technical and scientific skills. Sheer lack of applicants, lack of qualifications, and lack of experience figure most highly as particular problems. There appear to be significant variations by segment in the extent to which firms are experiencing recruitment problems, though the patterns are not entirely unambiguous.

Two in five companies report that they undertake some structured training of their workforces. However, analysis of the type of training undertaken suggests that much of this is the training of new recruits.

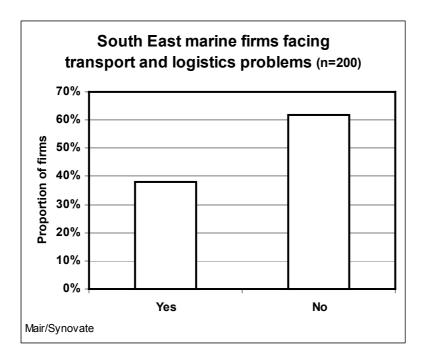
Skills and recruitment is clearly an important issue for a significant minority of marine sector firms. As an issue that is susceptible to local and regional policy intervention, this is clearly an area where the South East Marine Task Force may able to take, and to encourage, useful actions to support firms in the sector.

## 9 Transport and logistics

The survey and the in-depth interviews generated some data on transport and logistics.

### 9.1 Transport and logistics problems

Nearly two in five firms face transport and logistics problems.



Our analysis of statistics broken down by segment or firm type does not suggest any significant differences across the marine industry.

#### 9.2 Extra-regional communication

The in-depth interviews suggested that the region as a whole benefits from two types of extra-regional linkage. First, London is a major world centre for the marine sector and the South East provides ready access at somewhat lower costs. Second, given the international nature of much business, proximity to Gatwick and Heathrow airports is considered an advantage.

#### 9.3 Transport and logistics: conclusions and policy implications

We have only been able to introduce transport and logistics issues in this research. A high proportion of firms report transport and logistics problems, suggesting that this is an area that ought to be followed up. On the other hand, the region's marine sector does benefit from proximity to London and to major international airports; this could prove useful in improving the market profile of the marine sector in the region.

#### 10 The South East as a location

How do marine sector companies view the South East region as a location for their business? Is the South East still generally viewed as an attractive area for marine companies to operate in? Do firms face any specific challenges due to their location in the region?

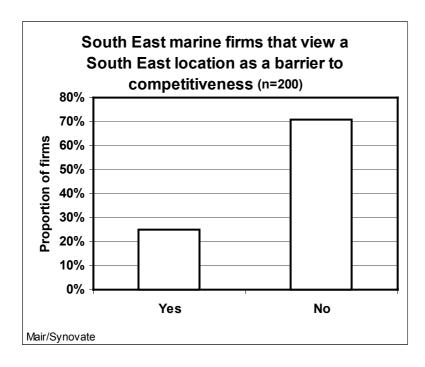
### 10.1 South East as a major marine region

In-depth interviews revealed that the South East is widely recognised in the industry as the core marine region in the UK. Interviewees were generally very positive about marine in the South East. Some believed the marine sector is much stronger than is sometimes perceived, a strength partly hidden by its diversity.

Southampton and the Solent in general was described by one interviewee as the 'epicentre' of marine in the UK. The concentration of marine related activity – not just companies but a plethora of trade, research and testing, training and other support organisations too - continues to draw in companies.

#### 10.2 Barriers to competitiveness

Notwithstanding the widely held view of the South East as an attractive location for marine businesses, the survey revealed that one in four companies believed that issues related to their South East regional location created barriers to competitiveness.



The barriers identified fell into a number of specific categories, some of which have been addressed in previous sections of this report. Principal among these are problems related to costs and to staff (cost is also the key factor in the latter issue).

Business problems due to South East location	% of the firms for which SE location is problem (n=50)
Costs	
The cost of housing/property/land/rent/office space	36.0
High costs/overheads/expensive area	28.0
Staff	
High staff costs/wages	18.0
Difficult to recruit staff/lack of applicants	8.0
High living costs	4.0
Transport	
Transport/congestion/traffic	14.0
Poor infrastructure/road network	6.0
Competition	
Competition/too many companies operating in the area	6.0
Other	
Weather conditions/flooding	4.0
We are not eligible for handouts/advice services available in other areas	4.0
Lack of other companies/suppliers in the area/others in our industry are based in other regions	4.0
Lack of land/space	4.0
Difficult to get planning permission	4.0
Other	22.0

#### 10.2.1 Areas of geographical isolation

There are distinct areas of the region where geographical isolation is keenly felt. The Isle of Wight is viewed as distinct from the rest of the region, which causes business travel and some recruitment difficulties. It can be difficult to attract the 'right' employees because of the 'lifestyle' culture which diminishes productivity and entrepreneurship.

Kent in general is also viewed as isolated, in part due to the absence of good East-West transport linkages across the heart of the region. Even pockets like Chichester are perceived as geographically isolated largely due to inadequate transport links, served only by slow trains, for instance.

#### 10.2.2 Growth pressures

The in-depth interviews reported that strong regional growth pressures also affect the competitiveness of companies. These pressures are not related to the marine sector as such but to the general growth of the economy in the South East. They are reflected in house prices, in increased commuting distances as employees seek out pockets of less expensive housing, and in pressure on salaries.

Thus while the region has a high concentration of skilled people, there is little spare capacity. Location is therefore inexorably becoming a weakness. Although there is a high standard of living, quality of life suffers because of congestion and travel time. The region is gradually becoming less attractive to younger people, with no local social life after work because most staff travel long distances to and from work. Moreover, it is increasingly difficult to attract people from other parts of the UK, other than London and the Thames Valley, because of housing costs.

Growth and congestion pressures appear to be most keenly felt in Southampton. Concerns range from an airport dominated by one company leading to high fares, to inadequate car parking for visitors, competition for sites from housing developments, high property prices, competition from the busy port restricting leisure marine uses, and environmental pressures restricting the creation of new moorings.

Some major marine sector companies are in part responding to growth pressures by shifting work elsewhere. Some are actively pursuing the 'Holy Grail' of 24 hour working with a global network of facilities. Within the UK, consideration is being given to opening satellite engineering centres in other UK regions.

#### 10.3 Comparing the South East with other regions

The survey revealed that three in four companies could not identify a better UK region for their marine business than the South East. The only other UK region viewed as attractive is the South West.

A better location than current location – UK	% of firms (n=200)
South West	7.5
South East (other)	6.0
East Midlands	2.0
Eastern	2.0
London	1.5
North West	1.0
Scotland	1.0
Wales	1.0
North East	0.5
West Midlands	0.5

Other	2.0
Don't know	6.0
Nowhere/wouldn't go elsewhere in UK	69.0

One in two firms, however, could identify a better global location for their business. The location of choice is the Mediterranean region of Europe, followed by the USA or the Caribbean.

A better location than current location – global	% of firms (n=200)
Mediterranean	9.0
Spain	7.0
France/South of France	6.5
USA	5.5
Caribbean	4.0
Middle East	2.5
Holland	2.5
New Zealand	1.5
Australia	1.5
Italy	1.0
Ireland	1.0
China	1.0
Other	7.5
Don't know	5.5
Nowhere/wouldn't go elsewhere in world	44.0

The in-depth interviews revealed that preferred comparative locations depend very much on the marine segment in question. Thus, globally, the sub-marine engineering segments tend to compare the South East to Houston, to Norway, or to Aberdeen. Some technology-oriented equipment companies find their key competitor regions to be in the USA. The leisure marine companies tend to compare the South East to the Mediterranean or the Caribbean. And the ship building and repair companies compare the South East to Germany or to Korea.

### 10.4 The South East as a location: conclusions and policy implications

Firms in the South East region face rising pressures on their competitiveness related to rapid economic growth and congestion. Costs are increasingly an important issue, and housing and commuting problems are making the region less attractive to incomers. Here, the South East marine sector is affected by overall economic issues not specific to marine firms.

Currently, at least, the research suggests that the problems of trying to run a marine business in the South East in a high-growth region are relatively unimportant compared with the isolation and skills shortages of some other UK regions. Thus while employment costs may be higher in the South East than other regions, this is compensated by higher productivity levels, lower turnover, and a better work ethic both native to the region and amongst the incomers ambitious enough to move in to the region. However, from a policy perspective it is not difficult to see sections of this industry being undermined by continued economic growth which crowds it out, restricts its expansion, and stifles its competitiveness.

## 11 The business support context

### 11.1 What business support do companies want?

Asked what forms of business support are in principle most useful to their firms, on average, employee training and marketing and diversification advice are most valued. However, there is very wide variation by company, and even forms of support not highly valued on average are highly valued by some firms.

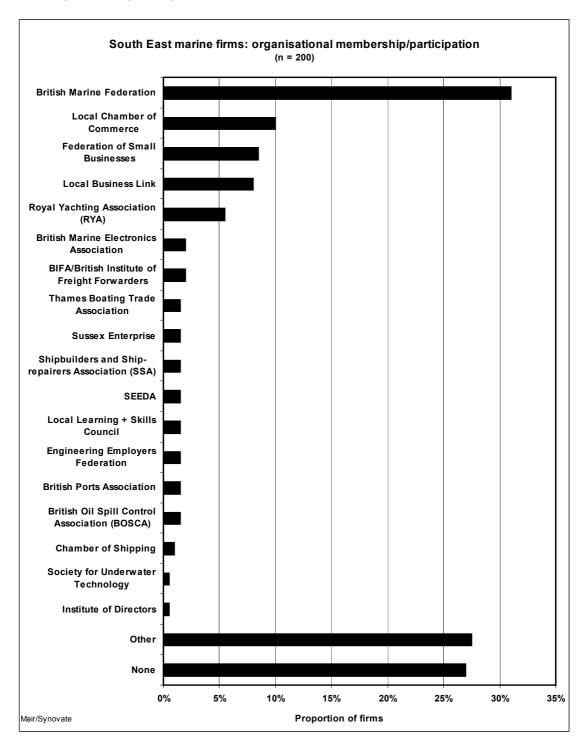
Form of business support	Average score (scale 1-10))
Employee training	4.7
Marketing and diversification advice	4.6
Financial advice	4.3
Operations and quality improvement programmes	4.1
Business planning and strategy consultation	3.9
Export advice	3.4

Local Business Links are current most utilised to obtain these types of business support.

Organisations	% of firms (n=200)
Business Link	15.0
British Marine (Industries) Federation	7.0
Private sector consultants (e.g. management	7.0
accountants)	
Bank	5.0
Chamber of Commerce	3.5
Accountant	3.0
Federation of Small Businesses	2.5
Local business link/enterprise	2.0
DTI/Trade Partners	1.0
Engineering Employers Federation	1.0
Learning + Skills Councils	1.0
Local college/FE/HE institution	1.0
Other small business association	1.0
Private training provider	1.0
South East England Tourist Board	1.0
UK Trade Partners	1.0
Other	8.0
Don't know	5.5
None	47.5

### 11.2 Membership of organisations

The British Marine Federation is the most notable industry organisation in terms of membership and/or participation.



#### 11.3 The business support context: conclusions and policy implications

The most valued forms of business support in principle are employee training and advice on marketing and diversification. However, the overall result masked wide variations in what forms of support are most valued. The British Marine Federation is the relevant organisation with the most members in the South East region. Local Business Links are most used in terms of obtaining the types of business support reviewed in this section.

From a policy perspective, on average, the firms surveyed want most support for employee training, and for marketing, suggesting that these should be prime focuses of a successful South East Marine Task Force. However, other support initiatives are also likely to find 'takers', at least among smaller numbers of firms.

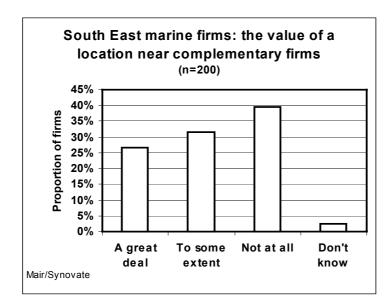
The prominence of the British Marine Federation as an industry body is a useful reminder of the valuable role that existing trade associations should play in SEEDA policy deliberations; similarly some existing small business support delivery mechanisms are valued by some firms, suggesting that the South East Marine Task Force should continue to work with these as well as the trade bodies to help make them more effective in the South East region.

## 12 Prospects for networking and clustering

What are the prospects for enhancing business networking and clustering in the South East marine sector? In this section of the report we build on the research reported up to this point, and adopt the SEEDA policy focus on local-scale networking and clustering activity, as one potentially significant business development activity to be co-ordinated by the South East Marine Task Force.

### 12.1 Value of local linkages

Over half of the firms surveyed believe that there is business value in being located near to complementary marine sector firms. Some segments, such as marine IT and ocean survey, appear to value these links more than others. There is no clear pattern by type of firm.



# Table: Value of local linkages by segment

	Total	Ship building	Ship repair	Boat building (leisure)	Marin <i>al</i> Leisure	Marine equipment	Marine IT	Port manage/ develop	Shipping	Maritime services	Cruise Industry
Total	200.0	30.0	42.0	55.0	106.0	87.0	26.0	25.0	34.0	68.0	20.0
A great deal	26.5	23.3	31.0	29.1	30.2	29.9	<mark>34.6</mark>	28.0	32.4	26.5	10.0
To some extent	31.5	36.7	33.3	38.2	34.0	34.5	34.6	<mark>40.0</mark>	20.6	32.4	40.0
Not at all	<mark>39.5</mark>	<mark>40.0</mark>	<mark>35.7</mark>	29.1	<mark>34.9</mark>	<mark>34.5</mark>	26.9	32.0	<mark>44.1</mark>	<mark>38.2</mark>	<mark>45.0</mark>
Don't know	2.5	0.0	0.0	3.6	0.9	1.1	3.8	0.0	2.9	2.9	5.0

	Oil & Gas	Ocean survey	Sub- marine cables	Unmanned under water vehicles		Aqua- culture	Desal- ination	Biotech
Total	33.0	18.0	8.0	11.0	5.0	12.0	11.0	11.0
A great deal	27.3	<mark>38.9</mark>	12.5	27.3	0.0	8.3	27.3	27.3
To some extent	<mark>36.4</mark>	<mark>38.9</mark>	<mark>62.5</mark>	<mark>63.6</mark>	<mark>60.0</mark>	<mark>58.3</mark>	27.3	<mark>54.5</mark>
Not at all	<mark>36.4</mark>	16.7	25.0	9.1	40.0	25.0	<mark>45.5</mark>	9.1
Don't know	0.0	5.6	0.0	0.0	0.0	8.3	0.0	9.1

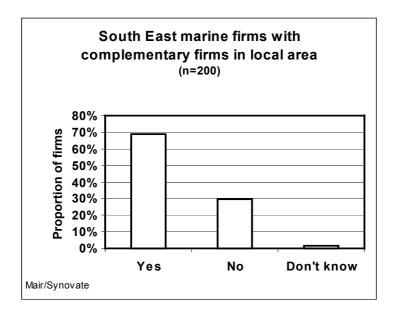
Table: Value of local linkages by firm type

		COM	PANY 1	TYPE		COMPANY SIZE					
	Total	PLC	Quoted /listed PLC	Sole trader/ partner ship	Other	1	2-5	6-20	21-100	100+	
Total	200.0	128.0	14.0	41.0	16.0	21.0	82.0	66.0	17.0	14.0	
A great deal	26.5	30.5	7.1	19.5	25.0	33.3	30.5	22.7	17.6	21.4	
To some extent	31.5	32.0	35.7	36.6	12.5	33.3	26.8	36.4	29.4	<mark>35.7</mark>	
Not at all	<mark>39.5</mark>	<mark>35.2</mark>	<mark>50.0</mark>	<mark>43.9</mark>	<mark>56.3</mark>	33.3	<mark>41.5</mark>	<mark>37.9</mark>	<mark>52.9</mark>	28.6	
Don't know	2.5	2.3	7.1	0.0	6.3	0.0	1.2	3.0	0.0	14.3	

		NY TUR	RNOVER	2	% OF SALES TO MARINE					
	Under £1m	£1-2m	£2-5m	£5-20m	£20m+	1-10%	11-50%	51-80%	81-99%	100%
Total	115.0	20.0	15.0	12.0	7.0	18.0	16.0	19.0	23.0	124.0
A great deal	27.8	10.0	<mark>40.0</mark>	25.0	14.3	11.1	31.3	5.3	26.1	31.5
To some extent	29.6	40.0	20.0	25.0	<mark>57.1</mark>	38.9	25.0	<mark>57.9</mark>	21.7	29.0
Not at all	<mark>40.9</mark>	<mark>50.0</mark>	33.3	<mark>50.0</mark>	28.6	<mark>44.4</mark>	<mark>43.8</mark>	31.6	<mark>52.2</mark>	<mark>37.1</mark>
Don't know	1.7	0.0	6.7	0.0	0.0	5.6	0.0	5.3	0.0	2.4

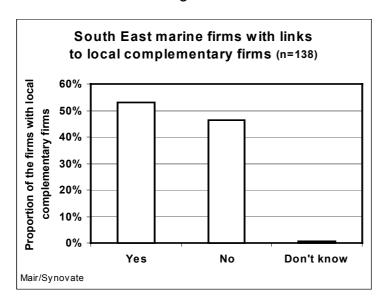
### 12.2 Are there complementary firms in local areas?

The location maps reproduced earlier in this report suggest that there are distinctive geographical concentrations of marine companies at a number of places in the South East region. But do marine firms recognise local groupings of complementary firms? The survey suggests that over two in three do recognise them.



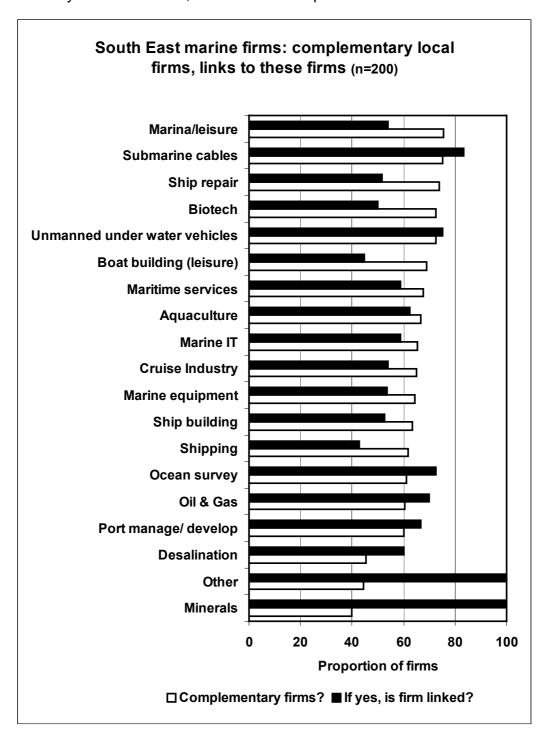
#### 12.3 Are companies linked?

Of the firms that recognise the existence of complementary firms in their area, a little over half have some form of linkage to these other firms.



### 12.4 Variation by marine segment

There is some variation across marine segments in the extent to which local complementary firms are recognised, and in the extent to which there are links to complementary firms. However, there is no clear pattern to this variation.



# 12.5 Nature of local linkages

For firms that do have local linkages, trading and information exchange are the most common connections.

Reported links with other local firms	% of the firms with local links (n=73)
Business	
We sell trade with each other/sell goods/provide	11.0
services to each other	
We refer/recommend customers to each other/pass	6.8
work on between companies	
We act as agents/brokers for each other/take bookings	5.5
Joint ventures/joint tenders	4.1
Information	
Information/knowledge sharing	16.4
Networking/social contact/gossip	12.3
We have regular contact/communication with each	12.3
other	
We share customer information	4.1
Organisational	
Link(s) with industry associations/professional bodies	13.7
Employees	
Shared labour/staff/use each others staff	8.2
We do joint training/use each others training services	5.5
Link(s) with training providers	4.1
Other	
Link(s) with engineering companies	5.5
Link(s) with marinas	4.1
We share equipment/use each others equipment	1.4
Refused	2.7
Other	21.9

Verbatim statements on the nature of these local links are presented in Appendix 3, to give a clearer 'flavour' of current local inter-firm co-operation.

#### 12.6 Opportunities for local networking and clustering: four focus groups

We now summarise the outcomes of the four local focus groups organised to explore prospects for promoting local marine networking and clustering across the region.

#### 12.6.1 Southampton background

Ports can be seen as examples of successful clusters now facing barriers, The Port of Southampton was discussed as an example of more 'traditional' sector clustering. The Port is responsible for 13,000 jobs at the port alone. Clustering concepts are vital to its economic success. Thus once it becomes big enough, it warrants two or more suppliers of a service, which creates fruitful competition, innovation, improvement and growth. In this sense the Port is the landlord and cluster organiser, with only a very small staff itself. Here, the Port could be seen as an ultimate example of a marine industries cluster in its own right, owning the docks estate, harbour, organising the pilotage, the lighthouse, but employing only 200 people directly – all the rest of the activity being 'bought in'. The Port is thus a small town, a very organic entity, from dredging to flowers, much wider than just the real estate. Thus the owner, Associated British Ports, is only the visible face of an already very successful cluster.

On the other hand, growth brings its own problems, in terms of the squeeze on premises, road access, housing difficulties, etc., and bumps into the difficulties presented by political opposition to growth. This suggests the value of seeing marine clusters also from the perspective of successful clusters and the difficulties they run into.

Not only the Port, but also the marina managers, utilise the cluster concept on a day to day basis in continually seeking out symbiotic businesses, to the point of defining different types of marinas appropriate for different market segments and attempting to fashion the appropriate cluster of supporting businesses (and removing the inappropriate) for each. The most successful marinas, commercially, which become known as centres of excellence, are precisely those with symbiotic tenants. Again, the market already organises clustering (essentially through an active freeholder in this case). Moreover, there are also cases where the marina owner invests in capital equipment, such as a crane, which is then available to the various tenants.

Therefore, essentially two types of clusters were recognised in marine industries. First, groups of small companies pulling together, and second large companies that organise others around them (eg Port, VT).

An example of under-realised potential because full clustering not achieved is the Ocean Village/Oceanography Centre location in Southampton, where site use issues (eg difficulties of securing otherwise-rational land swops) appear — so far - to have impeded the realisation of benefits of small-scale geographical clustering around the Oceanography Centre and Ocean Village. It is uncertain whether the full values of

attracting the further group of complementary firms/organisations believed to be potentially interested in the location will in fact be realised, notwithstanding a belief that the property issues might shortly be resolved. This might be interpreted as an instance of not using the marine assets of the sub-region to their full potential.

#### 12.6.2 Cluster opportunities

Is there a role for a Southampton or Solent marine business organisation? The group discussed 'how things get done' currently, with the predominant method currently being 'behind the scenes' lobbying and jockeying for position. A clearer set of broad ground rules (eg a shared vision and objectives) might be a desirable alternative.

There was discussion of the value of local marine business representative organisations. The general view appeared to be one of scepticism although this was not uniform. There did not appear to be support for a business organisation on the scale of the whole Solent "marine super cluster". The value of smaller organisations like Chichester Maritime was understood, but there was also scepticism about the value of this type of body for Southampton. It would need to have a small board of directors with a focused mission, for instance. No obvious purpose was generated. Moreover, there are existing bodies that are relevant, including the Central South Coast Alliance, composed of local authorities and which works with both SEEDA and SWRDA.

From a marinas perspective, marina businesses already work together on defined issues, such as the environment, coming forward to address them as a group.

The ultimate objective of clustering is to introduce the advantages of cooperating in synergistic relationships. How large a group is required for a cluster? This needs to be defined pragmatically, i.e. locally, not regionally. The focus on local networking is of value: locally manageable activities, with clear definitions of terms. But where is the best 'point of entry' for SEEDA to stimulate this activity? How can SEEDA get it started, particularly with small businesses, in terms of more cooperative business processes and exploring the benefits (and threats) of clustering?

Part of the original UK policy interest in clusters was related to the competitiveness barriers on biotech in the Oxford - Cambridge - London triangle due to planning and other growth constraints. In this type of context, it was suggested, the South East Marine Task Force might be steering clear of political issues like this by focusing on productivity and "raising the game". Counter to this, it could be argued, an economic entity like the Port achieved high productivity precisely through investment, growth and economies of scale. It was also suggested that SEEDA might not be able to steer around political issues for long if it is to address the real concerns of at least some marine segments (SEEDA's strong support for VT's Type 45 Frigate bid was noted).

Large marine companies like shipbuilders, it was suggested, should encourage clusters in their supply chains, and it was noted that SEEDA is already involved through other

*initiatives* in supporting this. It was noted that SEEDA had appointed Investor Development Managers (IDMs) to address the requirements of the larger companies on an individual basis.

In general, it was argued that SEEDA needs to understand the roles played by large companies in supporting often many smaller companies. Support for the large companies can therefore be essential; a cluster must include all interests in an area.

Creating new clusters or supporting existing clusters: where should the policy focus be? One strong view expressed is that the utility of forming clusters is blindingly obvious, but that we tend to talk of them as if they weren't already in existence. Should SEEDA therefore resource and try to generate and grow clusters (i.e. small scale activities trying to become large-scale), or should SEEDA take large-scale successful clusters and support these? This concern is that "clusters" is too readily associated with technology and the building up of small-scale activities.

It was believed that SEEDA had indeed focused to some degree on start-ups and innovation as far as the cluster concept and the new cluster fund is concerned. It was accepted that this was good as 'one has to start somewhere'. And larger groups are supported in different ways, eg skills development, or lean programmes (making existing clusters like aerospace work better). However, there was a danger that clustering in 'unsexy' segments or activities might be underplayed (or assigned to other SEEDA policy headings thus causing discontinuities from a marine sector viewpoint).

## 12.6.3 Medway background

The image of Medway as a marine region needs to be improved not only externally – for instance raising its profile with SEEDA - but also within Medway, where the history of the last twenty years (dockyard closure, requirement for urban redevelopment) may have led to a political culture that downplays the marine industries locally.

It was suggested that Medway Council itself might have 'turned its back' on the river in favour of other types of development. If the local authorities do not appear to understand the needs of the marine sector this may also be because the industry has not lobbied or educated them effectively enough.

Current 'piecemeal' redevelopment of the Medway River is creating three types of conflict of use.

- Between business users and residential where the growth of the latter may squeeze out the former as residents increasingly object to the business activities they were certainly aware of when the developments were launched (eg Limehouse development, with ships discharging just across the river)
- Between leisure marine business use (and therefore consumer use) and larger scale 'port' and 'industrial' business use

 Between marine business users and the heritage/tourism sector – much of the redevelopment around the dockyard having little to do with marine activities; at the same time there may be questions over the long term economic viability of the current configuration of the heritage tourism sector in Chatham.

For instance, while good dry dock facilities are in short supply, there are three which are currently being used for other commercial purposes which rationally ought to be located elsewhere. Indeed the heritage component of the dry docks, it was argued, might be better served by having them maintained by being worked.

Moreover, some new urban developments are believed to have 'turned their backs' on the river and face inland. Participants believe that the overall redevelopment process in Medway is failing to secure and take advantage of marine economic development opportunities, and that many of these will accordingly be lost in future. Landuse planning is therefore an important issue. The view was expressed that the difficulties would not be resolved until planning prioritised water transport for riverside sites — i.e. positive planning policies to encourage marine industries in their sole (waterfront) viable locations.

The comparison of Medway with Portsmouth may be of interest, where there are major historic attractions (HMS Victory) in a sub-region with other attractions (New Forest), with a 'live' dockyard, and, importantly, where the town effectively controls the commercial port. For Medway, it is proving difficult even to get people to travel from London for education/leisure purposes.

Marina companies are successfully attracting boats from London and the South Coast. This gets the river used, but there is great unused potential – the river could be developed much better. Bringing boats into the river is key, as this brings all sorts of other services in its wake, the support, and people to work on the boats as there is sufficient scale of activity.

There was some discussion over the long term prospects of some marine segments, principally ship repair. It was pointed out that while shipbuilding can be moved to eg East Asia, ships must be repaired where they are used. Indeed shortage of ship repairing capacity in southern and eastern England was leading to some 'local' ships being sent to the continent for repair. Ship repair is in fact a significant industry, however it requires capital investment to level the playing field against subsidised overseas competition.

Both the ports and the ship repair segments believe that foreign competitors receive substantial government support that they are denied. Some participants believe that government support for capital investment was vital to enable their marine segment to compete on a 'level playing field' with subsidised overseas companies. They were disappointed to find that this did not appear to be on offer through SEEDA, for instance.

Geographical proximities to the East of England (EEDA region) are translated into real linkages, with the Thames itself linking the two regions. Participants would not wish 'artificial' government boundaries to deter cooperation in 'natural' regions.

Boat handling skills is one area shared by the different marine segments present in the region. Technical people are required to maintain and operate river craft operated by many users. There are increasing concerns that the pool of technical skills is disappearing with an ageing workforce. In trying to recruit one apprentice marine engineer, a company discovered that there is now no training in Eastern Kent (notwithstanding the strong presence of port and shipping activity). It is difficult to recruit required hydrographic engineers even nationally. An important root of current problems is the decline of careers in the Merchant Navy and Royal Navy. Many marine businesses benefited in the past from employing trained former servicemen with strong marine interests. Moreover, with the closure of the Chatham dockyards in 1984 with the loss of 9,000 jobs, for some years there was a pool of labour, which has now dried up. There are now severe problems of age distribution, with many skilled men only having a few years until retirement and no replacement younger people 'in the pipeline'.

There is continuing legislative pressure and requirement to ensure companies are operating with competent people, and high skill levels are required in often dangerous environments. Yet it is increasingly difficult to find the right people. "Poaching" of key skills can result from the shortages. There are glaring gaps, and these need to be shown collectively through joint action, study, awareness raising, etc.

Nationally, the UK ports have formulated a skills group for the UK, and are trying to establish a skills group 'cluster' with the LSC to take a lead. However, from a national perspective this need appears to be seen as too small (by government) to warrant a national programme. Given the relative importance of port activity in the South East, the region might take a lead here. Alternatively, a national or regional initiative might create common standards and materials for local implementation.

#### 12.6.4 Medway cluster opportunities

A number of actions might be taken on a local basis, for instance through a local college. Successes in other engineering sectors locally were reported and could be a model. However, it would be important to build in practical experience, and while a university role might be welcomed, there was some concern that related training might be too 'academic' with insufficient depth of experience built in. The Medway Yacht Club/RYA is a significant player in providing key skills currently.

The River Medway Business Users Group was established 18 months ago, in part to improve links with Medway Council. The Council had welcomed this. The 'cluster' concept could be used to raise the profile of the industry to draw attention to its broader linkages and to improve understanding of the need to build more local co-operation activities and reduce inefficiencies caused by conflicting land use for example.

If the SEEDA/Chichester Maritime conference were 'repeated' at other locations as is currently envisaged, Medway could build on this – it was proposed to incorporate visits or a river trip as part of this and make use of the conference in part to educate local civic leaders as well as the region more broadly.

A local cluster group could be a voice for the local authority to speak with – important in raising profile and communicating issues to the local authority. It could begin to work together on common issues like skills, securing and consolidating the existing industry – it was recognised that it was important to achieve real results if businesses were to commit themselves and become fully involved. Skills and training was broadly agreed to be the right starting point.

The River Medway Business Users Association is a relatively new body currently dependent on input of member time. However, there has not been a history, recently, of marine businesses working together through such an organisation (though the harbour authority role of Medway Ports gives that company some responsibilities for planning river use).

The benefits of obtaining professional support for local organisation could include:

- Administrative tasks of organising meetings
- Research into key issues such as skills requirements
- Linking the local area into the South East Marine Task Force and the national SEA VISION campaign.

The local authorities could continue to play a role here in an early stage to offer some professional support, perhaps in the context of a SEEDA 'cluster fund' type initiative.

# 12.6.5 Chichester background

The ageing workforce at many marine companies reflects the paucity of training for young people. Specific skills requirements which are currently difficult to fill include high quality joinery, ship wrighting, and marine engineering - at NVQ 2 and 3 levels. Skills issues are so important to local marine firms across the region that they need to be taken up at SEEDA level. This is a bigger issue than can be addressed solely locally, as it appears that many students are following courses in subjects where there is little prospect of employment, yet there is insufficient training for sectors like marine with good employment prospects. The organisation of training may be 'demand led' in one sense, but the students themselves may not be in the best positions to determine real demand for skills in the economy.

The local college, which is recognised to be well organised and good at marketing itself, is nonetheless reluctant to look at courses that do not immediately fill. To address this problem, one solution could be to set up trial new courses locally, which could helpfully

be kick-started by SEEDA, to break the impasse caused by education funding mechanisms being so slow to respond to need, and risk averse. This resource could be used to design and market new courses of likely relevance to local businesses which, after a trial period, might 'sink or swim'. Inter-sector links on training may usefully develop through collaboration with, and investment by, Rolls-Royce, which requires woodworking (coach building, high quality finishing) skills for its new car factory.

It was noted that some other marine localities appeared to market themselves very successfully – Great Yarmouth, and Southampton, were given as examples. By contrast, Chichester does not have the same identity as a marine locality despite its history and tradition. The further development of a local identity is necessary. There was some discussion of the possible need to create and develop a regional identity as well – the South East (or the South?) as a marine region - though this was not conclusive.

Many SMEs are "one man bands" and do not have the management specialisms/time required to invest in an export drive – a typical SME problem. It could be beneficial to support more local companies to make initial forays into overseas markets through trade shows. These companies would also be helped by creating an image: "Europe's premier marine region" or its equivalent. There could be both a local and a regional element to this activity.

One suggestion is to invite customers to travel to Chichester and be well 'looked after'. Tourism and leisure marine could thus be linked by encouraging customers to travel to Chichester to buy boats. A broader opening up of the industry to tourism was discussed (including the Portsmouth and Chatham examples). Could the marine leisure segment organise tours to observe boat building activities by tourists, to enhance the image? It was noted that the new Rolls-Royce factory has incorporated a facility to offer tours of the factory.

#### 12.6.6 Chichester cluster opportunities

Traditionally, the District Council has played an active role as a focal point for signposting business support, and has actively supported the establishment of Chichester Maritime. Indeed it was recognised that the local authority has played a number of useful roles, including its planning role, acting as a neutral body, and taking a lead to pump prime and push local companies to organise themselves, through offering organisational leadership and administrative support. The local chamber of commerce has traditionally focused on 'high street' issues but is now looking into setting up an export club.

The value of improved local networking or clustering among marine companies has been tested and proven by the success of Chichester Maritime. This has relied up to this point on after-hours inputs by local business leaders, and the support of Chichester District Council as well as SEEDA. However, there are limits to what can be achieved using this organisational model. There is value in better organising the local linkages of

the business community in the sector; making a small investment could create a high leverage effect. A full-time person working on behalf of the sector could further stimulate the networking process. Parts of the task could include:

- better establish work experience and business-education partnership activities
- convince the more reluctant local companies to participate more actively by creating and communicating success.
- work with the careers service and teachers to promote the marine sector and inform students about careers (linking with the national Sea Vision campaign).
- learn from good practice elsewhere the Cornwall network was of great interest to focus group participants as a model.
- develop and organise promotional activities.

With other local examples, and the support of a national campaign and regional action through the South East Marine Task Force, local organising could now draw on wider experience and resources to accelerate the achievement of effective action.

Participants believed that Chichester could serve as a beacon in the region for local marine clustering that could become a model for other localities, pioneering co-operative solutions for the region's marine firms.

Are there more ambitious areas of joint action that could usefully be explored in parallel to addressing the shared skills and promotion agenda? One example would be a 'paint shop' facility, which several companies could benefit from by sharing its capacity. Another example would be to share testing capacity at, for instance, the Wolfson sea tank testing facilities at Southampton, by contracting for this as a consortium of companies.

#### 12.6.7 Subsea background

There is significant world-class strength in the South East, in knowledge, research, advanced robotics, in-depth front end engineering, concept development with particular technology focuses, etc. in global subsea projects. There is little manufacturing per se, however. Thus much of North Sea engineering is done from Aberdeen.

A significant characteristic of subsea in the South East is that so many companies 'point outwards' from the region in their market relationships. Most companies are significant exporters, with 90% or more of turnover generated overseas for most companies. These are globally competitive advanced technology and project management subsea companies located in the region for a combination of historical reasons and current global accessibility with headquarters linked to global transport links (ie Heathrow, Gatwick airports) and proximity to London for services and finance.

The marine sector was agreed to be far more fragmented and disparate than for instance automotive or aerospace sectors which appear to have a number of important

and clearly defined vertical supply chains which focus on a small number of downstream companies. Moreover, in subsea, the South East region has fewer 'tops' of supply chains, according to some participants, than Aberdeen. However, several of the Aberdeen tops are operational rather than strategic. There may be vertical supply chains in some niche markets within the South East. There are few clear or obvious 'supply chains' as such.

There is both scepticism about the value of working together, and broad agreement that many resources in the region are not exploited as they should be. Companies operate differently in their view of and relation to government support. From one perspective, industry needs to "client-manage" government if it is to access government resources effectively. From another perspective, companies tend to look inwards and/or to look after themselves, and should ask the question 'can they not obtain the same value or increased value by collaborating?' There is a 'discomfort factor' in dealing with an everchanging sea of government initiatives, and this in fact discourages clustering and collaboration. From a more sceptical perspective on the value of clustering for the South East, it might be argued that Aberdeen already has several sub-clusters of similar companies. The South East, by contrast, tends to have 'one of each type of company', implying that a group of subsea companies, such as those participating in the focus group, might not have much in common with each other. The question is, can government help UK companies compete in global markets? Can the UK be flexible enough as a host to support global industries? One can envisage that some support activities could be organised using 'clustering' principles.

There was discussion over the geographical scale of clustering. This discussion could be a diversion as it was important to look at whatever the actual geographical scale of clustering is in reality for an industry or sector.

London cannot be neglected by any viable South East subsea clustering, as it has key firms and university activities. Similarly there is Cranfield University which is formally in the East of England region. The RDAs wanted to encourage relevant links that are outside the region when these reflect 'natural' economic clustering.

Benchmarking of comparable marine clusters was agreed to be a potentially useful activity, with Brest in France mentioned as an example, as well as North West Italy. It was noted that on the one hand long-term government support to feed new technology into the Brest cluster created a different institutional environment, whilst on the other hand stimulating lessons could still be learned – even if about the importance of the institutional environment and how to alter it.

Competing with other subsea clusters has a number of implications for the South East. Aberdeen will run down over time, and is the only market for the companies located there. The South East, by contrast, is more broadly diversified in its geographical markets. The Houston oil and gas cluster doesn't have the training infrastructure, and indeed sucks people in from regions like the South East. Moreover, increasingly, many companies find their relevant skills base in, for instance, the Gulf. Here, highly skilled

engineers and project managers come from India and Pakistan. From this perspective, the challenge in the South East is not skills shortages per se, but the cost base (even if the skills supply was improved in the South East, the availability of skilled labour overseas at significantly lower cost could undermine its employment.)

#### 12.6.8 Subsea cluster opportunities

What might be the 'cluster agenda' for the South East in subsea engineering? Is there benefit to 'keeping ahead of the game' by working together? Which are the key themes that might be pursued in this regard? Technology, skills, marketing and market development?

It was noted that successful clustering should start from existing strengths rather than reinvent wheels. A key technology area that is strongly represented in this area is pipelines and risers. There is in fact already an informal cluster formed around marine measurement in the Guildford area, which has operated for years including regular meetings. This could be built on rather than another cluster reinvented. Similarly, the existing networks and support structures of the Society for Underwater Technology should be drawn on not duplicated – eg with special regional support. It was apparent that there was already extensive networking – but not necessarily under a 'marine' umbrella.

The South East, and indeed the UK, is not necessarily developing the technology to 'get ahead of the game' and counter the competitive 'threat' from other world regions. The South East needs to differentiate itself in the market, and it is crucial to act on this, as 'subbing' jobs to the Far East is only a temporary solution to competitiveness challenges. The South East needs to identify a specialisation that it offers to the global market – a global marketing of the South East product. This could be boosted and marketed. We are not using the capabilities on our doorstep. Can a proposed cluster help to articulate the needs and link together supply and demand? Linkages need to be made to Foresight-type activities to help companies gaze into the crystal ball.

There is widespread agreement about the value of encouraging increased communication, networking and information flow as a baseline activity, whether about market developments or university and other research resources. For instance, there is significant research activity relevant to subsea engineering in the region at the University of Reading. Bridging the gap between the research base in the UK and accessing that research is crucial. Government is likely to be taking action to address this problem, but it is unclear what or when.

Can a cluster help companies to put together bids for big contracts as groups? There could be scope for clustering in the form of forming partnerships with other businesses for sales or for large projects. The Italian concept of flexible business networks was mentioned in this regard. A cluster could provide a forum for people to build on developing their businesses.

South East expertise finds global markets, in countries from Angola, Brazil, around the Caspian Sea, etc. There is therefore not single market to pursue.

Clustering could help companies improve their knowledge, and cooperate, in addressing other markets relevant to their competencies. On diversification, how we came to our present position is of relevance. The South East has been successful, as it has had a strong engineering background in oil and gas and in project engineering, that has in fact evolved into subsea markets. The marine industry is very broad in definition, and most if not all the companies at the focus group would in fact define 'their' industry as oil and gas, usually offshore, not marine.

There may be potential for a cluster in this region but it is important to note that the sector is very diverse. Diversity could be perceived as a strength in terms of capabilities. Other sectors located in the region could be built on. From this perspective, where should the boundaries be drawn? This focus group concentrates on subsea and underwater engineering. Is this the same as 'offshore'? Clustering could focus around translating solutions into related industries like mobile/telecomms.

There are links to renewable energy, and to nuclear decommissioning. The key may be to focus on particular expertise areas and market these (rather than be constrained to 'marine' where there is overlap but not a close fit). Other forms of diversification include links to naval and defence activities, so subsea isn't all oil and gas, but includes marine renewables for instance. There is therefore a need to help companies as a group understand these evolving markets and develop cultures to deal with these very different markets, or seek and find partner companies that already work in these segments – eg with partnered marine renewables companies. The cluster could therefore target segments and potential linkages for its companies.

Skills development had been raised as a key issue by the DTI. It will be important to improve the image to attract people into the industry. Small companies in particular need people yet find it harder to obtain them. There could be scope for, for instance, joint graduate training schemes. Image of the industry is crucial. Comparisons were made with motor racing and the way its image appears to draw people in. There is potential for information sharing in terms of a careers forum; people move back and forth between companies which are effectively a collective group linked by the market according to market peaks and troughs. Thus developing skills may be one approach to cooperative activities.

What form of clustering to encourage: picking winners or generic support? There was a view expressed that focusing on particular technologies and market developments might not work as this would be too close to the market and to picking winners. From this perspective, clustering should focus on more general issues such as how to cooperate together to bring young people into the industry, or boosting levels of information and knowledge sharing particularly for SMEs.

#### 12.7 Linking national, regional and local initiatives

With the regionalisation of policy through the RDAs, industry perceives a proliferation of new business support agencies and could find it difficult to understand the system or where to obtain support. Is this a problem of perception, or is there real proliferation during a period of flux in the institutional fabric that will eventually lead to a new a better coordinated system? The cluster perspective at regional level is designed to help pull together potentially disparate actions on a sectoral basis. This is also the role of the South East Marine Task Force.

One focus group discussion noted that the Grampian region of Scotland, by contrast to the South East, had high levels of support for industry that is well organised, coordinated and easy to understand. Business needs similar support initiatives in the South East, or the marine sector in the South East runs the risk of further fragmentation then decline.

The Sea Vision initiative is a national campaign to raise the profile of marine industries and address skills shortages led by the Chamber of Shipping. As Sea Vision regionalises its campaign, there needs to be close co-operation with the South East Marine Task Force with the latter possibly serving as the delivery mechanism at regional level. Broad participation from industry was necessary to expand Sea Vision to cover the whole marine sector beyond shipping. The South East is one of the two key UK marine regions (along with Scotland).

At the same time the local networks and clusters need to be coordinated, and, where relevant, also connected to the Sea Vision campaigns. Similar problems related to skills and image appear to be faced, across the sector, by marine localities across the UK. This suggests a combination of national action or campaign and local action to implement or organise. The national Sea Vision campaign, with its focus on promotion and training, could be ideally suited to support and help co-ordinate activity by some marine networks and clusters.

#### 12.8 Prospects for networking and clustering: conclusions and policy implications

The prospects for enhancing clustering in the South East marine sector are good, for a number of reasons. Many companies recognise the existence of what are effectively local marine clusters of complementary firms. A high proportion of firms have network linkages to other local firms. Moreover, the concept of clustering is clearly recognised as a business strategy within the industry, particularly from a property development perspective at controlled waterfront locations - organising space to increase local business interaction at marinas and ports, local shared waterfronts, sub-contracting to some degree. Moreover, there is a strong culture within marine of belonging to the marine sector – or at least marine segments - that enhances the prospects for clustering.

The potential for clustering is enhanced in some places precisely by the absence of previous action; there is latent frustrations about what could be achieved, and there is latent interest in taking action. Moreover, a significant national and regional support framework is in place if it can be mobilised by applying the resources required to leverage it – including the Sea Vision campaign, the national trade associations (British Marine Federation, Society of Maritime Industries, Shipbuilders Ship Repairers Association, Society for Underwater Technologies, Chamber of Shipping, etc.) and the South East Marine Task Force. Finally, the SEEDA Cluster Fund competition has clearly stimulated interest in the cluster concept by legitimising the views of those who already supported it and increasing the understanding of those who did not.

On the other hand, there are a number of hurdles which need to be addressed if the potential for enhanced clustering is to be realised. First, there is a risk that the sheer breadth of the marine segment in some local areas will tend to reduce *real* shared interests to lowest common denominator *basic business issues* – public image, to some extent skills, land use planning, for instance. To move beyond these towards more sophisticated business issues, self-selecting business groupings with narrower focuses may be required. This provides a clear rationale for the business-driven approach of the South East Marine Task Force and also for the establishment of cluster groups around focused activities. Here we can begin to sketch the different roles of the South East Marine Task Force and network and cluster groups.

Second, there is clearly wide variation in the levels of sophistication of business operations across the South East marine segment in terms of strategies to deal with external firms, abilities to collaborate, links to R&D support, etc. The larger technology companies, ports and marinas, for instance, are considerably more sophisticated in their behaviours than the smaller leisure marine firms. Moreover, the culture of 'independence' that is widespread in parts of the leisure marine segment may inhibit collaboration. Here it is important from a policy perspective to offer a mix of opportunities, ranging from ambitious new initiatives for those organisations prepared to get involved to basic training and marketing services for those firms unable or unwilling at least initially? - to join more ambitious projects. It may therefore be necessary to provide significant organisational resources to attract industry interest through 'sharedinterest' networking activities such as profile raising and skills enhancement, much of which is essentially defensive, for current players. At the same time this needs to be balanced against more forward-looking work that can potentially create new high-value activity. An important focus of the latter will be to address the roles of the universities and research institutions where serious concerns have been raised about their commercialisation strategies and their prospects for continuing to act as organisation nodes for companies that have traditionally worked with them.

A related third point is scepticism in some local areas that 'anything will be done', which also suggests a mixed network/cluster approach and will require careful groundwork. In some places the starting point appears to be a low organisational base and there is a risk of what may appear to be painfully slow progress at first before initiatives take off.

SEEDA needs to be prepared to engage over the medium-to-long-term – albeit with proper monitoring of progress and prospects - in line with cluster theory.

Fourth, the local focus groups began to unearth something of the business power structures that will need to be reckoned with if they are not to inhibit potentially useful activities: port authority controls over water access, for instance, or large company "lack of support" for independent technology development at suppliers. It will therefore be important to obtain a fair degree of support from the larger marine firms in the region to ensure that there is not a counter-reaction from them, in which clustering policy is viewed simply as support to help small firms compete against, or otherwise challenge, large firms.

Finally, there is the sheer complexity of organisational networking for SEEDA:

- 5. one national campaign (Sea Vision)
- 6. at least five relevant national trade associations
- 7. one regional task force
- 8. potentially, four-six local network and cluster organisations

SEEDA's requirement is the right organisational matrix for the South East Marine Task Force and the different local network and cluster organisations which can also draw on (and support) the national initiatives. In our view simple and attractive divisions of labour that map the national and regional onto strategy, policy or the more generic, and the regional and local onto operations, delivery or tailoring, are likely to provide only an initial cut.

From a resource perspective, if SEEDA wishes to explore and develop marine clusters to their full potential it will wish to invest in the capability to mobilise national and regional resources to support them on a medium-term basis. One model would be to actively support a number of *local networks or clusters* by assigning full-time/half-time cluster organisers on a geographical basis to provide the foundations of local organising. The Cluster Fund would continue to award smaller grants to specific business development schemes. Finally, SEEDA would ensure that the Marine Task Force had sufficient professional and administrative support to drive, support and manage the work of increasingly demanding – the more successful they prove - cluster groups.

# 13 Appendix 1: firms and organisations consulted

#### In depth interviews/discussions:

John Axe

Alastair Bissett, Qinetiq

Norman Broadbent, Century Dynamics Ltd

Les Chapman, Mouchel,

Phil Cheetham, Century Dynamics Ltd

Peter Christie, Department of Trade and Industry

Graham Clarke, Euromaritime

Adam Corney, South West of England Regional Development Agency

Kevin Deeming, METOC plc

Sarah Dhanda, British Marine Federation

John Dowden, Chamber of Shipping

James Grazebrook, Halyard (M&I) Ltd,

Mark Hannam, Caris Info-Mar

Owen Harrop, BMT Marine Information Systems Ltd

Clive Hogan, British Marine Federation

Glyn Humphries, Vikoma

Jane Jackson, Portsmouth City Council

Mike King, Isle of Wight Partnership

Dominic O May, Berthon Boat Company Ltd

Lindsay McCurdy, Portsmouth City Council

Howard Pridding, British Marine Federation

Colin Ray, Halliburton KBR

Peter Sanders, Sanders Sails

lain Shepherd, Marcom Defence

Sean Tarver, Southampton Institute

Peter Taylor, SEEDA

Stuart Thompson, RayMarine

Jonathan Williams, Marinetech South

Henrietta Winstanley, Green Marine

Bob Young, SEEDA

#### Focus group participants

Chris Atwell, FBM Babcock Marine Mike Barnett, Southampton Institute Steve Beasley, Chatham Historic Dockyard Trust Giles Billingsley, Medway Bridge Marina Richard Binks, Sonardyne International

Keith Birch, Southampton Oceanography Centre

Dr Brian Bostock, Halliburton KBR

Andrew Brice, River Medway Business Users Association

David Brookes, BP

John Carter, A&P Ramsgate

Anthony Chappell, Tarquin Boat Company

Peter Christie, Department of Trade and Industry

Des Crampton, Medway Ports

Steve Davis, Chilworth Enterprise Hub

Chris Dudgeon, OTM Consulting

Anne Duncan, Yellowfin Ltd

Ian Gallett, Society for Underwater Technology

Julian Gowing, Opal Marine

Steve Hull, JP Kenny

Paul Huseman, A&P Chatham

Brian A Jones. Zentech International

Andrew Kent, Port of Southampton

Dr David Kirkley, Oceantech

Mark Mardell, VT Group

Nigel Richardson, University of Southampton

Neil Scotton, EEF South

John Sharp, Cranfield University

lain Shepherd, Marcom

George Smith, Chichester District Council

Martin Smith, Shaftesbury Homes and Arethusa Venture Centre

Jeff Walters, Southampton City Council

John Watson, Marina Developments

Elizabeth Watt, Department of Trade and Industry

Clive West, Shipbuilders and Shiprepairers Association

Captain PR White, Medway Ports

Dr Jonathan Williams, SEEDA marine industries advisor

Phil Wilson, Furgo Ltd

Ed Woollard, Medway Council

Paul Woodcock, Medway Council

Brian Woodman, FMC Energy Systems

Firms surveyed

200

- Reports/discussions at three South East Marine Task Force meetings.
- Presentation and discussion at South East Marine Task Force conference Chichester October 2002.

South East Marine Task Force report back March 2003.

Dirk Aldous (Peters/BMF)
Chris Atwell (FBM Babcock)
David Buck (BL Wessex)
Les Chapman (Mouchel/TPUK)
Graham Clarke (Euromaritime)
Sarah Dhanda (BMF)
Ian Grant (QinetiQ)
Annie Hairsine (OTM)
Jane Jackson (Portsmouth CC)
Brian Jones (Zentech)
Sally Lynskey (GRP Laminates)
Iain Shepherd (Marcom)
Jeff Walters (Southampton CC)
Bob Young (SEEDA)

# 14 Appendix 2: South East marine companies surveyed: product/service

- ADVICE ON ALL THINGS TO DO WITH MARINE ENVIRONMENTS.
- AGENTS FOR BERMUDAN COMPANY WHO ARE SHIP OPERATORS LOOKING FOR VESSELS AND CARGO AND OPERATING VESSELS.
- AS A COMPANY WE BUILD AND REPAIR BOATS.
- BERTHING BOATS, IT'S A MARINA.
- BERTHING BOATS. WE'RE A MARINA.
- BOAT BUILDERS, MANUFACTURE AND SALE OF RIBBED INFLATABLE BOATS FOR THE LEISURE INDUSTRY.
- BOAT HIRE.
- BOAT HIRE.
- BOAT MOORINGS AND SMALL BOAT REPAIRS.
- BOAT REPAIR AND RESTORATION.
- BOAT REPAIR.
- BOAT REPAIRS AND REFITS.
- BOAT REPAIRS AND REFITS.
- BOAT REPAIRS.
- BOAT SALES.
- BOAT SALES.
- BOAT SELLING.
- BOATYARD AND CHANDLERY BARGE.
- BOOKING AGENTS FOR SAILING BOATS AND NAVIGATION COURSES. SAILING SCHOOL IS IN CORFU.
- BUILD BOATS, RIGID INFLATABLE BOAT MANUFACTURING.
- BUILDING AND CIVIL ENGINEERING CONSTRUCTION.
- CABLE SUPPLY
- CHANDLERY. SHOP. SELLS CANOES, DINGHIES, SAILING HARDWARE.
- CLASSIFICATION SOCIETY. CERTIFY SHIPS.
- CONSULTANCY
- CONSULTANCY. ADVICE ON TOURISM AND DEVELOPMENT IN THE MARINE. SECTOR.
- CONSULTANT ENGINEERING COMPANY.
- CONSULTANTS IN MARINE ENGINEERING.
- CONSULTING CIVIL AND STRUCTURAL ENGINEERS.
- CONSULTING ENGINEERS.
- CUSTOMS CLEARANCE AGENT.
- DESIGN AND ENGINEERING
- DESIGN AND EVENTUALLY BUILD AN AUV, WHICH IS AN AUTONOMOUS UNDERWATER VEHICLE.

- DESIGN YACHTS.
- DESIGN, MANUFACTURING AND INSTALLATION OF MARINE ELECTRONIC EQUIPMENT.
- DISTRIBUTES ELECTRONICS TO THE MARINE INDUSTRY.
- DISTRIBUTION AND SERVICE. WE SELL AND DISTRIBUTE FISHING TACKLE.
- DISTRIBUTION OF MARINE ELECTRONICS.
- DISTRIBUTION OF NAVIGATION SYSTEMS.
- DISTRIBUTION OF NEW YACHTS.
- DISTRIBUTION OF SAIL CLOTH.
- DISTRIBUTION. PALETTE SERVICE.
- DISTRIBUTOR OF MARINE COATINGS. THE COMPANY DOES MANUFACTURE THEM BUT NOT AT THIS SITE.
- DISTRIBUTOR OF MASTER VOLT INVERTERS, CHARGERS, GENERATORS AND OTHER ACCESSORIES RELATING TO THIS.
- ENGINEERING SERVICE IN BOARD AND OUT BOARD REBUILDING ENGINES FOR BOATS.
- ENGINEERING SERVICES FOR THE MARINE INDUSTRY. DEEP SEA SHIPS.
- ENGINEERING SUB-CONTRACTORS.
- EXCURSIONS BY BOAT.
- EXPORT BY AIR AND ROAD.
- FERRY OPERATION.
- FREIGHT FORWARDERS.
- FREIGHT FORWARDING AGENCY. ARRANGE CUSTOMS CLEARANCE AROUND THE WORLD. BOTH IMPORT AND EXPORT.
- FREIGHT FORWARDING AND ROAD TRANSPORT.
- FREIGHT LOGISTIC SERVICE.
- HARBOUR AUTHORITY AND PILOTAGE.
- HIRE OUT BOATS NARROW BOATS, CANOES, ROWING BOATS AND PASSENGER BOATS.
- I PROVIDE MOT TO BOATS.
- INSTALLATION OF ELECTRICAL EQUIPMENT INTO MARINE EQUIPMENT.
- INSTRUCTION ON SAILING AND NAVIGATION.
- INSTRUMENTATION AND CONTROL EQUIPMENT SUPPLY AND INSTALLATION.
- INTERNATIONAL TRANSPORT. FREIGHT FORWARDING.
- JET SKI AND BOAT SALES AND REPAIR.
- LEISURE SERVICE.
- LEISURE. MARINE LEISURE MARKET. NON-COMMERCIAL ACTIVITIES.
- LOCAL GOVERNMENT OFFICE.
- LOOKING AFTER BOATS, MOORINGS.
- MANAGEMENT DEVELOPMENT. ALL MANAGEMENT SKILLS AND PERSONAL DEVELOPMENT UP TO STRATEGIC LEVEL.
- MANUFACTURE AND DISTRIBUTION OF SOLAR POWERED MARINE ELECTRONICS.

- MANUFACTURE SAILS FOR SAILBOATS.
- MANUFACTURER AND WHOLESALER FOR THE LEISURE MARINE INDUSTRY.
- MANUFACTURERS OF MARINE SAFETY EQUIPMENT.
- MANUFACTURING OF JOINERY KITS AND WE FINISH BOATS.
- MARINA MOORING, BOAT YARD REPAIRS AND DRY DOCKING.
- MARINA OPERATORS.
- MARINA.
- MARINA. WE DO BOAT BUILDING.
- MARINE ENGINEERS. THE INSTALLATION AND REPAIR OF VACUUM OLIQUE SEWAGE SYSTEMS ON SEA GOING VESSELS.
- MARINE ENGINES. THEIR REPAIR, MAINTENANCE, RECONDITIONING, ET CETERA.
- MARINE INSURANCE AGENCY AND MARINE LOSS ADJUSTOR.
- MARINE PHOTOGRAPHY.
- MARINE RETAIL. SELLING, SERVICING, REPAIRING OUTBOARD MOTORS, JET SKIS.
- MARINE SERVICE. REPAIR OF LEISURE BOATS.
- MOORING AND LISTING BOATS.
- MOORINGS AND SLIP WAY.
- NEW YACHT SALES.
- OCEAN RACING.
- OIL POLLUTION CONTROL EQUIPMENT MANUFACTURE.
- PORT RELATED CONSTRUCTION.
- PRECISION ENGINEERING
- PRIMARILY ENGINEERING CONSULTANTS. SERVICE. DESIGN AND MANAGE PRODUCTION OF SUB-SEA CONNECTION SYSTEMS.
- PRODUCE YACHT DECK GEAR.
- PRODUCT RESEARCH AND DEVELOPMENT AT THIS SITE AND UK SALES. SALES OF MARINE NAVIGATION SOFTWARE.
- PRODUCT TESTING.
- PROVIDE SAILING LESSONS AND HOLIDAYS IN THE CARIBBEAN.
- PROVIDING WEATHER AND ROUTING ADVICE. WEATHER FORECASTS.
- R&D TO INTRODUCE NEW TECHNOLOGIES INTO THE MARITIME INDUSTRIES.
- RADAR AND COMMUNICATION COMPOSITE STRUCTURES.
- REFUSED.
- REPAIR AND MAINTAIN BOATS.
- REPAIR OF MARINE EQUIPMENT.
- RETAIL CHANDLERY.
- RETAIL OF CHANDLERY BASED PRODUCTS FOR THE BOAT INDUSTRY. REPAIRS AND ACCESSORIES.
- RETAILING MARINE EQUIPMENT.
- SAIL AND POWERED BOAT TRAINING IN THE SOLENT.
- SAILING INSTRUCTION.
- SAILING MOTOR CRUISING SCHOOL. TEACHING SERVICE.

- SALE OF AND MAINTENANCE OF BOATS
- SALE TRAINING. NO PARTICULAR INDUSTRY JUST TRAINING YOUNG AND DISADVANTAGED PEOPLE.
- SALES AND MARKETING. EDUCATIONAL TRAINING EQUIPMENT.
- SALES. MARINE ELECTRONIC EQUIPMENT REPAIR.
- SCIENTIFIC AND TECHNICAL CONSULTANCY.
- SELLING ELECTRONICS.
- SERVICE BERTHING AND STORAGE OF BOATS.
- SERVICE CONSULTING ENGINEERS.
- SERVICE PROVISION OF BOAT MAINTENANCE REPAIR.
- SERVICE PUBLISH SHIPPING MAGAZINE NEWS.
- SERVICE YACHT BROKERAGE.
- SERVICE INDUSTRY. ANGLING TRIPS ALONG COAST FOR SEA FISHING.
- SERVICE INDUSTRY. MOORINGS AND REPAIR WORK FOR BOATS IN COMMERCIAL AND LEISURE INDUSTRIES.
- SERVICE WE PROVIDE. SURVEY AND CHARTER LEISURE BOATS.
- SERVICE. DIVING CONTRACTOR.
- SERVICE, FREIGHT FORWARDERS.
- SERVICE. JET SKI LAKE. WE HIRE AND SELL JET SKI'S.
- SERVICE. PROVIDE TRAINING FOR SAILING VESSELS.
- SERVICE-EXPLORATION AND DEVELOPMENT OF OIL AND GAS IN AN OFF-SHORE SETTING.
- SHIP REPAIR.
- SHIP TOWAGE.
- SHIPPING AGENTS.
- SHIPPING LINE. FREIGHT.
- SOFTWARE DEVELOPMENT HOUSE.
- SPECIALITY IN FIVE AXIS MACHINING. MAKING AND REPAIRING IMPELLORS AND PROPELLERS.
- STATUTORY HARBOUR AUTHORITY.
- STORAGE OF BOATS, ASHORE OR AFLOAT AND CRANING IN AND OUT OF THE WATER.
- SUPPLY AND INSTALLATION.
- SYSTEM DEVELOPMENT. DEVELOPING ELECTRONICS AND SOFTWARE FOR SHIP AND SUBMARINE SIMULATORS AND NAVIGATION SYSTEMS.
- TECHNOLOGICAL SPARES PROVIDED TO SHIPS.
- THE BROKERAGE OF SECOND HAND MULTI-HULLS OF BOATS.
- THE COMPANY OWN AND RENT MOORINGS.
- THE MARKETING OF MARINE PRODUCTS AND VESSELS FOR A NUMBER OF COMPANIES.
- THE SUPPLY OF OCEANOGRAPHIC RESEARCH EQUIPMENT.
- THIS IS A MARINE SPARES AGENCY.
- THIS IS A TEACHING AND TRAINING SCHOOL FOR SCUBA DIVERS.
- TOWAGE AND MARINE SUPPORT FOR MARINE ACTIVITIES.

- TRADE ASSOCIATION.
- TRAINING CENTRE FOR THE ROYAL YACHTING ASSOCIATION.
- TRAINING ORGANISATION. TEACH PEOPLE TO SAIL YACHTS AND DRIVE BOATS. YACHT DELIVERY. CHARTER WORLDWIDE. SERVICE INDUSTRY.
- TRAINING PEOPLE TO SAIL LAND YACHTS.
- TRAINING. EDUCATION. RESEARCH AND CONSULTANCY FOR THE INTERNATIONAL MARITIME INDUSTRY. WE WORK FOR BIG SHIPPING COMPANIES ALSO.
- WE ARE A MARINA.
- WE DEAL WITH THE ENGINEERING MATTERS FOR OUR LOCAL COMMERCIAL PORT. I'M IN CHARGE OF 40KM OF COAST LINE, SO I'M RESPONSIBLE FOR COASTAL DEFENCES AND FLOODING DEFENCES.
- WE FIT ELECTRONICS FOR LEISURE AND COMMERCIAL COMPANIES IN THE MARINE SECTOR.
- WE INSTALL ALTERNATIVE FUEL SUPPLIES IN PETROL ENGINES. SUCH AS LPG - LIQUID PETROL GAS.
- WE MANUFACTURE FUEL PIPES THAT ARE USED IN A MARINE AREA.
- WE MANUFACTURE MARINE ENGINES. AND ALSO MAKE VERY POWERFUL ENGINES USED ON ICE BREAKERS AROUND FINLAND.
- WE MANUFACTURE OIL POLLUTION CONTROL EQUIPMENT.
- WE OPERATE YACHT BROKERAGE. WE ALSO IMPORT THE NEW TRAILER SAILOR BOATS AND CHANDLERY FROM POLAND.
- WE ORGANISE AND CHARTER ANGLING.
- WE PROVIDE SPACE FOR TENANTS AND BERTH HOLDERS.
- WE SELL AND DISTRIBUTE LUBRICANTS AND CHEMICALS.
- WE SELL NEW AND USED BOATS.
- WE SELL PERSONAL WATERCRAFT JET SKI'S ETC.
- WE SELL STEERAGE GEAR AND BEARINGS FOR YACHTS.
- WE SUPPLY MECHANICAL PARTS FOR YACHTS.
- WE USE OUR EXPERTISE TO CLEAR UP OIL SPILLS.
- WE WORK WITH GROUPS OF YOUNGSTERS AND CORPORATE BUSINESS. TEAM BUILDING, LIFE SKILLS TRAINING ABOARD A YACHT.
- WHOLESALER TO RETAIL OUTLETS. SUPPLY SCUBA DIVING ACCESSORIES.
- YACHT BROKER.
- YACHT BROKERAGE AND YACHT CHANDLERY.
- YACHT BUYER AGENT.
- YACHT CHARTER.
- YACHT CHARTER.
- YACHT CHARTERS.
- YACHT DESIGN SERVICE.
- YACHT DESIGN.
- YACHT MARINA OPERATION AND CONSULTANCY.
- YACHT TRANSPORT SERVICES. MARINE ENGINEERING. BOAT STORAGE AND MOORINGS. THE MAIN ONE IS YACHT TRANSPORT.

# 15 Appendix 3: local inter-firm co-operation in South East marine

Listed below are survey verbatim responses from firms that engage in local networking. These are useful in giving a 'flavour' of current local inter-firm co-operation.

- 1. SHARING OF INFORMATION ABOUT BOATS FOR SALE. 2. USE CONTRACT WORKERS FOR REPAIRS AND FITTING OF EQUIPMENT. IE ELECTRICAL.
- 2. WE TEND TO USE EACH OTHER'S KNOWLEDGE RE CLIENTS AND TECHNICAL KNOWLEDGE. 2. WE HAVE LINKS WITH LOCAL COMPANIES REGARDING THE STAFF FORCE AND USE EACH OTHER'S STAFF. THIS IS FOR INDIVIDUAL APPLICATIONS ON PROJECTS IN A CONSULTATIVE MANNER, NOT PERMANENT STAFF TRANSFERS.
- 3. A JOINT VENTURE WITH TETRAPAK. WE TENDER FOR WORK JOINTLY WHERE IT IS ADVANTAGEOUS TO BOTH TO TENDER FOR FOREIGN CONTRACTS.
- 4. ANOTHER BOATYARD THAT IS RUN BY MY SON. WE SUPPORT EACH OTHER AND HE IS SKIPPER FOR OUR BOATS AS WELL.
- 5. AQUARIUS CHARTERS. CHANNEL DIVING.
- 6. ASSOCIATE COMPANIES IN OPERATION WE SHARE INFORMATION ON CUSTOMERS.
- 7. BRITISH MARINE SERVICES AND BRITISH MARINE ELECTRICAL ASSOCIATION.
- 8. BRITISH PORT ASSOCIATION. BRITISH MARINE FEDERATION.
- 9. COMMUNICATION WITHIN OUR LITTLE WORLD IS VERY GOOD. ON AN ADHOC BASIS. NOT FORMALLY.
- 10. DAVIS MARINE, MARINE ENGINEERS.
- 11. FIRST, EMPLOYEE E-LINKS FOR RECRUITMENT OF STAFF LEAVING OUR OR THEIR COMPANIES. SECOND, CUSTOMER LINK BASES WHERE WE REFER CUSTOMERS TO EACH OTHER DEPENDING ON WHO IS ABLE TO MEET THE CUSTOMERS NEEDS.
- 12. FIRSTLY, LINKS WITH THE HOO MARINA REGARDING WORK. WORK CAN BE PASSED DUE TO THE SPECIFIC NATURE OF THE WORK AND DEPENDING ON BUSINESSES. SECONDLY, WE SHARE EQUIPMENT AND INFORMATION WITH THE ROWAN MARINA.
- 13.G.W.R WHICH IS A MARINE INSURANCE COMPANY. M.S.S WHICH IS A MARINE SUPPORT SERVICE.
- 14. GENERAL GOSSIP. SOCIAL CONTACT.
- 15.I OFTEN PASS ON MY CLIENTS TO A TRUSTED ORGANISATION FOR SOME TRAINING. THEY TAKE COURSES ON MY BEHALF IF THEY HAVE EQUIPMENT I DO NOT POSSESS AND BECAUSE I KNOW THEY GIVE A HIGH QUALITY OF SERVICE.
- 16.IF WE HAVE TOO MUCH WORK WE CAN PASS WORK ONTO THEM AND, LIKEWISE, THEY DO THE SAME TO US.
- 17. INSTITUTE OF CIVIL ENGINEERS.

- 18. JOINT ADVISING OF COMMON SERVICES. EXCHANGE RESULTS OF ACTIVITIES AND HAZARDOUS AND TECHNICAL INFORMATION.
- 19. JUST INFORMAL COMMUNICATIONS.
- 20. MANY ARE MEMBERS OF YBDSA: YACHT BROKERS DESIGNERS ASSOCIATION. THERE ARE LOTS OF COMPANIES IN THE AREA THAT ARE COMPETITION FOR US.
- 21. MARINE ENGINEER CONTRACTORS AND HULL SPECIALIST WE PROVIDE EACH OTHER WITH RECOMMENDATIONS TO EACH OTHERS BUSINESS.
- 22. MARINE TECHNICAL SOUTH LTD COMBINES ORGANISATIONS FOR MARINE PROJECTS. ALSO, INFORMAL LINKS.
- 23. NETWORKING WE PROVIDE EACH OTHER WITH INFORMATION THAT WOULD BE RELEVANT TO PEOPLE IN THE MARITIME TRADE.
- 24. NETWORKING. GOSSIPING BASICALLY. WITH MY BUSINESS RIVALS.
- 25. NETWORKING. WE SHARE INFORMATION AND KEEP EACH OTHER UPDATED.
- 26.OUR LINK IS THROUGH THE CIVIL ENGINEERING CONTRACTORS ASSOCIATION, WHO REPRESENT OUR INTERESTS TO GOVERNMENT AND THROUGH WHOM WE KEEP IN TOUCH WITH NEW GOVERNMENT REGULATIONS AND SO ON.
- 27. OUR LINKS ARE OUR DISTRIBUTORS. PARTICIPATE IN MEETINGS AND SHARE CREDIT INFORMATION.
- 28.OUR LOCAL RUN ORGANISATION CALLED COSMIC WE LOOK AT THE ORGANISATION'S STRUCTURE AND THE TRAINING OF STAFF.
- 29. PURELY NETWORKING.
- 30. PURELY SOCIAL CONTACT WITH OUR RIVALS.
- 31. REFUSED.
- 32. SHARE LABOUR FORCES.
- 33. SHIPPING LINES.
- 34. THE ONLY LINK IS THAT WITH LABOUR FORCE. PEOPLE CHANGE JOBS AND WE HAVE LINKS TO MOVE STAFF BETWEEN COMPANIES.
- 35. THE YACHT CHARTER COMPANY AND SAILING SCHOOL.
- 36. THERE ARE TWO COMPANIES SIMILAR TO OURS WHO WE WITH NETWORK WITH BY E-MAIL, PHONE OR WE SEE AT MEETINGS OF THE MULTI-HULL BUSINESS USERS' GROUP.
- 37. THERE'S A COMPANY WHO MAKE BOAT COVERS AND MY HUSBAND SOMETIMES FITS THEIR BOAT COVERS.
- 38. THERE'S A MANUFACTURING COMPANY IN ALTON WHO MAKE SIMILAR EQUIPMENT TO US, WE SOMETIMES SUPPLY THEM AND THEY SOMETIMES SUPPLY US. THERE'S AN ORGANISATION IN SURREY WE KNOW, WHO ARE MORE INVOLVED IN DESIGN AND WE EXCHANGE INFORMATION WITH THEM ON MARKET TRENDS.
- 39. THROUGH THE INSTITUTE OF CIVIL ENGINEERING AND THE INSTITUTE OF STRUCTURAL ENGINEERING.
- 40. TRIDENT.
- 41. TWO SUPPLY CHAINS CALLED METOC AND F.M.C.
- 42. VERY LOOSE NETWORKING.

- 43. WE ARE A SUPPLIER TO A NUMBER OF THEM IN TERMS OF MATERIALS AND SERVICES.
- 44. WE ARE ABLE TO GET LINKS TO OTHER SIMILAR BUSINESSES AND ADVICE.
- 45. WE ARE ALL MEMBERS OF THE SAME ORGANISATION: MARINA. THAT'S WHERE WE GO TO DO THE WORK. THEY ARE IMPORTANT TO ME.
- 46. WE ARE IN CONTACT WITH NAVAL ARCHITECTS AND HAVE CONTACT WITH THEM IN MANY AREAS. WE ARE IN CONTACT WITH BOAT BUILDERS, ALSO, WHO ARE MY CLIENTS.
- 47. WE ARE ONE OF ABOUT 10 BUSINESSES THAT OPERATE FROM A BUSINESS ESTATE. WE CONFER FAIRLY CLOSELY.
- 48.WE ARE THE LICENSED AGENT FOR GOODS THAT WE SELL TO LOCAL MARINE COMPANIES.
- 49.WE COMMUNICATE. WE ARE MEMBERS OF THE MEDWAY MARKETING GROUP WE AIM TO CONSERVE OUR LOCAL RIVER IN MEDWAY. IF WE HAVE ANY PROBLEMS OR CONCERNS THAT ARE ISSUES TO US ALL WE LOOK FOR THE BEST WAY FORWARD WE DON'T WORK AGAINST EACH OTHER.
- 50. WE DO HAVE CONTACT WITH ALL THE OTHER MARINAS ALONG THE RIVER MEDWAY. WE ALSO, HAVE LINKS WITH ENGINE REPAIR FIRMS, AS THIS IS A SERVICE WE DO NOT PROVIDE.
- 51. WE DO LOTS OF NETWORKING.
- 52.WE DON'T MAKE OIL ABSORBENT MATERIALS SO WE MARKET THE ONES FROM ANOTHER COMPANY. ALSO, ANOTHER COMPANY MAKES PUMPS OF LESSER QUALITY THAN OURS, MORE DISPOSABLE AND WE MARKET THAT AS WELL.
- 53. WE HAVE LINKS WITH A COUPLE OF LOCAL COMPANIES, ONE IS TESBANK WHERE HAVE A LABOUR EXCHANGE. OTHER LINKS ARE ALL LABOUR BASED.
- 54. WE HAVE LINKS WITH A FOREST BASED SITE WHERE PEOPLE GO FOR TEAM BUILDING. WE TEND TO ACT AS A WATER BASED OFFSHOOT.
- 55.WE HAVE ONE LINK WITH RAYMARINE WHO LICENSE OUR AUTOPILOT SYSTEMS AND WE UNDERTAKE COLLABORATIVE DEVELOPMENT WITH THEM. WE, ALSO, UNDERTAKE JOINT PRODUCT DEVELOPMENT WITH CHELSEA TECHNOLOGIES.
- 56.WE KNOW ALL OUR RIVALS AND SPEAK TO THEM INFORMALLY ABOUT THINGS LIKE PRICES.
- 57. WE MEET AT VARIOUS SHOWS, TRADE DO'S AND MARINE FEDERATION AREA MEETINGS.
- 58.WE PROVIDE THEM WITH A SERVICE AND THEY PROVIDE US WITH A SERVICE.
- 59. WE TRADE BETWEEN OURSELVES.
- 60. WE TRADE WITH A VARIETY OF THE CLUSTER COMPANIES.
- 61. WE WORK TOGETHER IN THE SAIL TRAINING SCHOOLS.
- 62. WE WORK TOGETHER WITH THE SHORE TRUST AND SHARE INFORMATION WITH THEM ABOUT ISSUES SUCH AS FUNDING. THEY ARE ALSO INVOLVED IN SKILLS TRAINING FOR YOUNGSTERS.

- 63. WE WOULD APPROACH OTHER ROYAL YACHTING ASSOCIATION APPROVED SKILLS IF WE COULDN'T DO A JOB. SOUTHAMPTON WATER ACTIVITY CENTRE DOES SOME TRAINING THAT WE CAN'T.
- 64. WE'VE GOT LINKS TO DISTANCE LEARNING COURSES. WE PROMOTE THEM FOR OTHER COMPANIES. WE TAKE THE BOOKING.
- 65. WITH PRACTICAL SEA SAILING SCHOOLS, WE DON'T DO COASTAL PRACTICAL TRAINING SO WE HAVE LINKS WITH THOSE THAT DO.