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The Future of London's Maritime Services Cluster: A Call for Action





August 2004



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Foreword

Michael Snyder Chairman, Policy and Resources Committee Corporation of London

Although it may come as a surprise to many, London remains the global centre of the maritime services industry. We no longer see ships unload cargoes at the Pool of London and Canary Wharf, but where the warehouses once stood, new offices house a skilled workforce upon whose knowledge the international maritime services industry depends.

The maritime services businesses clustered in London serve the world. Lawyers, brokers, financiers and many other specialists export their knowledge to international markets, to the benefit of the UK's balance of payments. The firms they represent are located in London because of access to a deep pool of inter-related expertise and skills, and an inter-connected capacity to meet the complex requirements of modern maritime business.

The maritime services cluster is a national asset. It should come as no surprise then that other countries covet what London has. Indeed, our competitors have active programmes in place to lure companies away from London to new locations. We must not allow this to happen.

This report, by Fisher Associates, is a call for action. It provides a detailed understanding of how the cluster works, how it competes with rival centres and what policy measures are necessary to ensure London maintains its current pre-eminence. I welcome its conclusions. The Corporation of London will continue to work closely with Maritime London to remedy the weaknesses identified in this report so that we maintain the competitiveness of the London maritime services industry. I hope many others, in both the public and private sectors, will join us in this aim.

> Michael Snyder London August 2004

Introduction Richard Sayer

Chairman Maritime London

There is no denying that London is the world's biggest and best maritime services centre. Based on years of experience London's ship-broking, legal, insurance and countless other support services are internationally renowned and make a very important contribution to the UK economy. The global shipping industry turns to London for professional, high quality services that are second to none.

But the key question facing this diverse sector is whether this pre-eminence will continue to be the case in the twenty first century. Can London's maritime services sector rise to the challenge of increasing competition from cities around the world seeking to emulate London's success? Can we take London's continued success for granted? Without positive and co-ordinated action I fear not.

I was pleased when the Corporation of London, the body which provides local government services for the City of London, announced that it wished to commission an independent report to survey the key issues facing London's maritime cluster and to suggest ways in which London can meet the competitive challenges it faces. We now have the completed report, and I am delighted with the frank approach it adopts in highlighting the many issues the sector faces.

Within the report you will read about the cost pressures pushing London's maritime cluster apart, the need for new talent and the supportive role that the public sector should play. We now stand warned, by a majority of respondents to the survey, that in ten or twenty years time London will no longer be the pre-eminent maritime services centre.

This report identifies the lack of cohesion within London's diverse maritime sector as a key weakness. Maritime London, the UK's maritime services promotional body, is an industry led initiative seeking to address this very problem. Set up in 2000 with seed money from the Corporation of London, some 100 companies representing the entire spectrum of London's maritime activity support this initiative as subscribing members of Maritime London and are working together to promote London in a positive manner. We support London's maritime sector through a varied programme of promotional activity, but more backing is needed from London's 1,750 companies and organisations involved in this huge sector if we are going to make a real difference.

The challenge is for Maritime London to turn the recommendations made in this important report into reality. We can only achieve this with the support of the industry. If you think that your business could be affected by the maritime sector moving from London, then should you not be doing something about it?

Richard Sayer London August 2004

Executive Summary

Over 1,750 companies or organisations that participate in maritime activity have offices in London. 79% have their registered office in London, and the remainder have a trading office. Many are located in the City, but a significant proportion is located in other London Boroughs.

The maritime services cluster in London is a very large, mature and dynamic sector. It is also a key exporter of maritime services worldwide. It comprises shipping, intermediate services, maritime governance and regulation, support services, and industry associations. It enjoys a high reputation for the quality of its services, in particular maritime law and ship-broking. The cluster is characterised by depth in the capability and number of firms in each sector, breadth in terms of the range of services offered, and complicated intertwining of supply chains. Strong cluster forces hold it together. It is a classic cluster, with a geographic concentration of interconnected companies, specialised suppliers, service providers, and firms in related industries.

However, cost pressures and the influence of overseas competitors will increasingly try to break it apart. Cost pressures will try to *push* the cluster apart. London is a dynamic but high cost environment, and shipping is an industry deeply conscious of its margins. Competitive pressures will try to *pull* the cluster apart. The axis of world economic activity is moving eastwards and competing centres in the Far East will gain in stature. The fact that Singapore calls its strategy to develop as a global maritime centre "London Plus" should say something. The combination of push and pull could be destructive.

This leads some industry professionals to conclude that London will lose its preeminence in maritime services. Whilst 98% of those surveyed in this report agree London is pre-eminent in maritime services *now*, 59% believe that this will have been lost in 10 to 20 years time. It is important to take actions soon to defend the London maritime cluster. It is a super-tanker that cannot readily change its course. There are significant opportunities to defend the cluster, against both cost pressures and competition, but capitalising on these opportunities will require all stakeholders to act with a cluster level collective response.

Institutional Responses

The public sector has a major role to play. When asked to rank London's position against criteria considered important for competitiveness, London was top for six out of eight criteria. It ranked poorly for "a supportive government", and "tonnage owned or controlled by the cluster". The public sector is in danger of letting the cluster weaken. If this happens, it will take substantially more resources to try and recover the position (if it can be done) than are needed to maintain it. Central and local government must get behind this cluster. Central government must develop improved understanding of the cluster and accord it increased priority and support. Relevant London local authorities and the London Development Agency must coordinate strategic thinking and actions.

A step change in private sector attitudes is needed. Cooperation amongst companies (where possible) will raise collective competitiveness. Companies should develop a cross-selling culture to grow business across the cluster as a whole. They must encourage new talent into the industry.

Development of a partnership philosophy between the public and private sectors is needed. The public sector benefits significantly from the economic value of the cluster, and it should engage. The private sector needs to learn how to work with the public sector. This partnership should manifest itself in a strong, well-funded cluster organisation, which should pursue projects and initiatives aimed at supporting London's pre-eminence in maritime services.

Strategic Measures

Maritime services have much to learn from the approach taken by London's financial services sector – which interacts with financial services clusters elsewhere in the UK in a complementary and mutually supportive fashion on both the national and international stages.

Recognising that on occasion, cost pressures will prevail over cluster advantages, **London must develop a wider perception of itself as a** *national* **maritime services cluster**. Thus, in strategic terms, engagement with UK cities that have a lower cost base offers an alternative to losing firms to competing *overseas* clusters, and will help prevent them reaching critical mass. Cities such as Southampton, Liverpool and Glasgow will benefit from jobs and inward investment. London will benefit from stalling its key overseas competitors. All will benefit by being able to market world leading expertise backed by a variety of cost bases.

Notwithstanding this, **London should develop a strategy of participation in all the emerging competing overseas clusters** to ensure that it remains relevant and involved, and thereby avoid any one competitor reaching dominance where it may challenge London.

Another key area for development concerns education and careers. London must disseminate its needs to those who can provide educated talent, and work with schools on its own patch to encourage children and students to think of maritime careers.

Tactical Initiatives

There are many tactical initiatives or projects that can be pursued. London should **promote a vanguard maritime identity as** *the* **maritime services city**. Related to this it should **develop an iconic showpiece** "Maritime Centre/Village" that offers cost-effective office space for smaller firms and associations, and opportunities for co-location to maximise cluster factors. It should develop an intranet/extranet for maritime services to rival the ambitions of overseas clusters. It must better exploit synergies with the world leading financial services cluster it shares the City with.

Finally, **central government must develop a comprehensive set of public policy and financial proposals for London** to ensure that it is put on the same footing as its competitors. This would include, for example, finally ending speculation on tax changes affecting foreign ship-owners; introducing tax incentives for ship purchase such as exist in Germany and Norway; and providing support for cluster partnerships, the Maritime Centre and the intranet/extranet project.

1 Industry Overview

The Corporation of London appointed Fisher Associates to undertake a study into the maritime services cluster in London in January 2004. The objective was to provide a detailed understanding of how the cluster functions, how it competes with rival centres, and what measures, if any, might be necessary to ensure that it maintains its current pre-eminence. *This research is substantially based upon the views of industry,* obtained through a combination of around fifty interviews and workshops, and a survey to which 99 firms responded.

The objective of this section is to describe the maritime services cluster in London to people who may have little prior association with the maritime industries or with cluster theory.

1.1 Conceptual Definition

Cluster theory has developed over the last ten years as a tool for better describing economic activity in service or knowledge-based regional economies. The essence of a cluster is that the value of the whole exceeds the sum of its parts, and that there is a critical mass - in one geographical place - of unusual competitive success in a particular field.

A leading proponent of the theory is Professor Michael Porter, an eminent management thinker, who defines a cluster as *geographic concentrations of interconnected companies, specialised suppliers, service providers, firms in related industries and associated institutions that compete but also co-operate.* To paraphrase Porter on cluster dynamics: *To grow, clusters must innovate, improve productivity, improve access to employees and suppliers and information, exploit complementarities, give birth to new businesses, and engage locally. Improving the competitiveness of the cluster needs a cluster-level, collective response, and new modalities for public private partnership.*

The cluster approach applied to the maritime sector forms an important component of many local governments' policies, stretching from the UK to Singapore to Australia and into the US. The purpose of the approach is to facilitate conditions for high levels

of innovation and productivity growth. This means facilitating: strong competitive businesses; appropriate research and education facilities; supportive labour markets; and specialised infrastructure and policy environments

Clusters concern "geographic concentrations". This study has had to adopt a practical working definition of London. In broad terms, we have defined it as companies with a London address. This therefore includes the City of London, other central London postcodes, and the outlying London postcodes.

We have made exceptions to this definition, and we highlight the importance of a few "leader firms" that are located outside London but which clearly have a regular interaction with it. Leader firms are firms with the ability to lead the development of the cluster by dint of their impact upon it (e.g. on the demand base, or on innovation, or on the companies in their supply chain).

1.2 Composition of the Maritime Services Cluster

The term "maritime services" means different things to different people. We have explained that the cluster approach concerns "interconnected companies, specialised suppliers, service providers, and firms in related industries". Thus we define maritime services to include an interconnected supply chain that covers several distinct activities:

- Shipping: ship-owners; charterers and cargo interests; ship managers; shipbrokers; liner agencies
- Intermediate Services: marine insurers (capital providers, insurance companies, underwriters/managing agents; Lloyd's insurance brokers); bankers and accountants; technical consultants and surveyors; legal advisers (lawyers, arbitrators, and average adjusters)
- Maritime Governance and Regulation: International Maritime Organisation and country representatives; classification societies; Flag State; Lloyd's insurance market; Baltic Exchange; UK Government
- Support Services: Commercial consultants and researchers; media firms/ publishers/conference organisers; information and communication technology

(ICT) services; manning and recruitment agencies; maritime universities and colleges

• Industry Associations: national and international sector representatives; unions

The diagram in Figure 1.1 overleaf gives an overview of the cluster in a form that borrows from a representation of the Dutch Maritime Cluster (and is therefore familiar to many in the industry).¹ It is possible that "maritime commerce" is a more accurate description of the cluster.

Most of the rest of this section provides a basic description of these five sectors for those who are not familiar with the maritime world. (Readers who are industry professionals may choose to skip to Section 2.)

¹ Peeters, C. *et al.* (1999). *De Nederlandse Maritieme Cluster; Economische Betekenis en Structuur, Nederland Maritiem Land serie #13*. Delft University Press, Delft. Reproduced in Wijnolst, Niko, Jan Inge Jenssen and Sigbjørn Sødal, *European Maritime Clusters*, Dutch Maritime Network in association with Agder Maritime Research Foundation, Norway, November 2003.

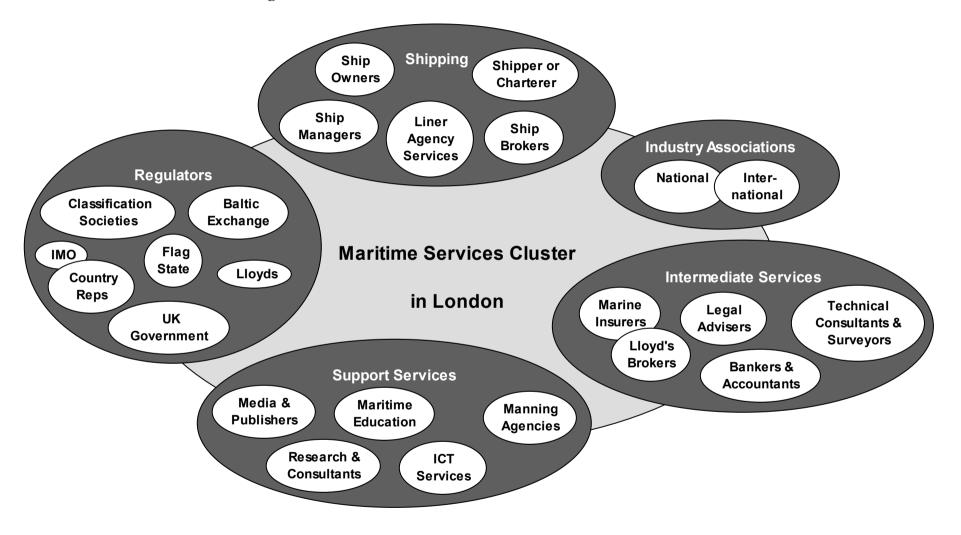


Figure 1.1 – Overview of the Maritime Services Cluster in London

1.2.1 Shipping

The core of this cluster concerns the movement of cargo, which generates a supply and demand relationship between the company paying for the freight and the ship owner. In broad terms, shipping comprises two markets that tend to operate in different ways and use different labels (summarised in Figure 1.2).

	"Liner" cargoes carried in containers or "unit" form	Cargoes carried in "bulk" (e.g. grain, coal, oil)		
General	The buyer of shipping buys a slot or allocation of space. Vessels operate on regular routes and are generally specialised for their trade e.g. Container ships, Reefer ships, Forest products	The buyer of shipping (charterer) buys a whole ship or part of it for a voyage or a time period. The two key subdivisions of the bulk market are dry cargo and tanker		
Term for seller of goods	Shipper	Shipper – often a mine or major commodity company.		
Term for buyer of goods	Consignee	Consignee - often a power producer or steel plant or refinery etc.		
Contracts Ships are chartered under a contract known as a charterpart		known as a charterparty.		
	Goods are shipped under a document called a bill of lading.			
Usual terms of shipment				
	Means that the buyer of the goods hires the ship.			

Figure 1.2 - Summary of Key Shipping Terms

A charterer must find a ship to carry the cargo. Equally, ship-owners must find cargoes for their ships if they are trading on the spot market (trading via successive voyage charters), or obtain a longer term time charter. Sometimes charterers and ship-owners make agreements direct, but mostly this is accomplished through a shipbroker. Traditionally, both charterer and ship-owner had their own shipbrokers, but increasingly one shipbroker acts for both parties.

Shipbrokers add value because they know about many different cargoes and shipowners. They charge 1.25% of the value of the freight for their services. Helping to achieve an agreement between a charterer and a ship-owner is known as fixing a ship. Once the ship is fixed, shipbrokers provide post-fixture services to help their clients achieve a smooth transaction.

It is important to understand that profit can be made and lost in shipping in two ways:

- Through the trading of the vessels from freight earned
- Through the rise or fall in the value of a ship

Some shipbrokers specialise in the sale and purchase of vessels themselves, thereby acting as an intermediary between two ship-owners.

Shipping markets are often cited as an example of near perfect competition, which means that they are very responsive to changes in the supply and demand balance – albeit over a cycle of several years. This leads to marked swings in freight rates, and the value of vessels. For example, the recent surge in demand for inputs to produce steel in China has helped drive freight rates up to unprecedented levels. This increases the level of ships' earnings, spurring owners to order new tonnage, but as these come on the market the supply constraint will ease and freight rates fall. Conversely, depressed demand due to recessive factors can result in periods of sustained losses. Shipping markets are therefore generally regarded as cyclical.

The risk attached to rises and falls in the level of freight rates has resulted in the development of financial instruments to hedge these risks. Instruments known as Forward Freight Agreements (FFAs) are used to do this. The FFA market is a largely Over The Counter (OTC) market with transactions typically being arranged by brokers working for commission. Vessel owners who wish to secure their revenue for the future seek a counterparty (typically a cargo principal such as a grain house or oil company) who similarly wishes to secure future freight costs. An FFA is therefore a (notional) vessel charter transaction struck between these two parties for a fixed price for a given period in the future. When the future period starts, one party pays the other the cash difference between the previously agreed price and the present freight market indices and route rates as published by the Baltic Exchange. There is no physical delivery of a vessel, but the mechanism has enabled both owner and charterer

to hedge their exposures. A market is developing for "paper trading" of FFAs as financial instruments or derivatives that can be traded in their own right. Speculative interest from those with no natural exposure can sometimes add liquidity.

The Baltic Exchange is a collective representative of the shipbrokers and principals which acts as a kind of information clearing house. It collects daily information from leading brokers on fixes for key shipping routes, and publishes indices that help shipbrokers to judge the market. The shipping world generally trades in US\$ denominated terms, and therefore many players in the shipping sector use currency hedging to protect themselves against exchange rate fluctuations.

Ship-owners often outsource the commercial management and/or the technical management of vessels to ship managers. The level of outsourcing depends on the philosophy and expertise of the owner. Commercial managers are responsible for the trading and the revenue performance of the vessel. Technical managers deal with the operation of vessels – items such as fuel (known as bunkers), crewing, maintenance and repair, and regulatory compliance. Ship managers can add value because they have expertise, or because they offer economies of scale from the management of a larger fleet. Economies of scale might arise from greater buying power for bunkers, efficiency in employing a larger pool of crew, or the ability to pool several vessels to obtain contracts for large volumes of regular shipments.

It can be appreciated that a bulk ship-owner may deal with only a few charterers per year, whereas a liner ship-owner with a fleet of container ships may deal with hundreds of shippers per voyage. The capability required to support liner shipping is therefore extensive. Much of the process for booking slots on ships has been webenabled, but significant people resources are still required in the liner shipping industry to maintain relationships with customers, overview documentation, deal with problems, quote for freight etc. Some liner companies outsource various elements of this to agencies, usually known as liner or shipping agencies. These provide booking and other relevant services for ship-owners, adding value through their economies of scale, costumer links, and sometimes branding. The agency sector is under pressure from ship-owners taking such activities back in-house, and several have recently merged or been taken over.

1.2.2 Specialist Services

Shipping requires a number of must-take intermediate products that provide markets for:

- Insurers: hulls, cargoes and liabilities via Lloyd's of London, the London Insurance Market, and P&I Clubs, mostly placed via brokers
- Financial services providers: financing vessels; accounting; providing hedging instruments
- Technical services consultants: cargo surveying; ship surveying; other services
- ICT services providers: outsourced supply services
- Maritime lawyers: for both contentious and non-contentious work

The providers of these specialist services differ from the shipbrokers/ship managers/agencies described earlier in that they provide a product or service that most charterers and/or ship-owners must use in the normal course of events.

The insurance sub-sector is centred upon two key market places – Lloyd's of London and the London Insurance Market. The Lloyd's of London market is quite complex in its own right. Members of Lloyd's provide the capital used to underwrite insurance risks on which the market is built. Corporate members include international insurance companies. Individual members providing capital are known as Names.

An insurance syndicate is a group of Lloyd's members, corporate or individual, who provide capital to back the liabilities they insure. Syndicates operate as independent business units within the Lloyd's market who compete for business, and cover either all or a portion of risks. There are 65 insurance underwriting syndicates operating within the market, covering many speciality areas including marine, aviation etc.

Syndicates are run by managing agents who appoint underwriters to write risk on behalf of the syndicate membership. Managing agents have a franchise to operate within the Lloyd's market. Some are quoted companies listed on the stock exchange, others are private companies. In some instances, managing agents also act as capital providers to syndicates they manage, and have a multi-faceted role as corporate members, agents and franchisees.

Accredited Lloyd's brokers place risk in the Lloyd's market on behalf of clients. These brokers use their specialist knowledge to negotiate competitive terms and conditions for clients. There are 165 firms of brokers working at Lloyd's, many of whom specialise in particular risk categories. Any insurance broker can access the expertise and resources of Lloyd's by making contact with an accredited Lloyd's broker.

The City of London hosts the London Insurance Market - a distinct, separate part of the UK insurance and reinsurance industry, comprising companies that predominantly deal in high-exposure risks. Approximately ten of these companies are involved in direct marine insurance and perhaps fifteen in marine reinsurance. Other participants in the market include Lloyd's syndicates, P&I (Protection & Indemnity) Clubs, and brokers who handle most of the business.²

P&I Clubs form another section of the marine insurance sub-sector. They insure in respect of third party liabilities and expenses arising from owning ships or operating ships as principals. There are thirteen Clubs acting as independent, non-profit-making mutual insurance associations, insuring over 90% of the world's blue-water tonnage.

Although the Clubs compete with each other for business, they pool their larger risks under the auspices of the International Group. The International Group of P&I Clubs exists to arrange collective insurance and reinsurance for the Clubs, to represent the views of ship-owners and charterers who belong to those Clubs on matters of concern to the shipping industry, and to provide a forum for the exchange of information. The International Group and eight key members are based in London.

² See International Financial Services London, *Insurance, City Business Series 2004*, January 2004.

Finance for the sale and purchase of vessels is provided by various banks and finance houses, several of which have specialists in international shipping markets. Finance on vessels is generally secured through a mortgage on the vessel, or through structured or lease finance arrangements. Bonds are also used. When things go wrong, banks will often appoint ship managers to manage vessels that they become owners of through default. Financial expertise is also required in accounting. Because of the international nature of the business, there are opportunities to optimise taxation and financial structures, and some firms specialise in this type of advice.

Maritime lawyers provide non-contentious advice mostly with respect to financing and sale and purchase of vessels. They also provided arbitration and contentious advice in the event of disputes. These can be over charter-parties, typically where one party is claiming delay or additional cost caused by the other party. These are referred to as dry cases and are heard by the Commercial Court. Disputes caused by collisions, salvage and total loss are known as wet cases and heard by the Admiralty Court. Disputing parties will often use arbitration and increasingly mediation to conclude a dispute without going to court.

London is particularly strong in maritime law. This is due to the reputation of the English legal system and its specialised maritime courts where the judiciary have built up a core of shipping expertise. This means that parties can expect to receive a fair hearing from people who understand the issues. It is for this reason that charter-parties between companies of different nationality often provide for English Law and jurisdiction to govern disputes.

Most charterers and ship-owners will need to use technical consultants during the course of their transactions or in the operational management of vessels. Such firms provide services such as determining how much cargo has been loaded on to a ship, assessing the vessel for compliance with charter-party conditions (e.g. seaworthiness), and advising on technical issues such as repairs. They may also work with or on behalf of regulatory bodies such as classification societies, which require regular surveys of vessels, or flag state organisations that enforce certain standards.

1.2.3 Maritime Governance and Regulation

The International Maritime Organisation (IMO) is headquartered in London, and is the only UN agency in the UK. The objectives of the IMO are to provide machinery for cooperation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; and to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships. The IMO is empowered to deal with administrative and legal matters related to these purposes.

The IMO directly employs some 300 people, but its significance to the cluster is much greater than this implies. There are 164 member states in IMO, many with representatives in London. IMO conventions on safety, pollution and, recently, security provide the bedrock for much of the regulation of the international maritime industry, and it therefore acts as a locus for related regulatory bodies (such as the representatives of Flag States and classification societies) and technical consultants who provide services in connection with maintaining IMO standards.

Flagging of a ship refers to the registration of a ship under the jurisdiction of a particular country's ship registry. The purpose of placing a ship under a ship registry is to provide the ship with a state's national character and protection under its laws, both diplomatic and commercial. Commercial protection is with respect to the title of the registered owner, and the priorities of interests holding security over the ship (especially mortgagees). Ships fly the flag of the flag state under which they are registered, and most of the leading states have an office in London to assist with the monitoring and enforcement of the flag's standards.

The Maritime & Coastguard Agency (MCA) oversees the British flag or ship registry. The British flag is currently under revival in terms of the number of ships registered because of the recently introduced tonnage tax. This tax is an alternative method of calculating corporation tax profits by reference to the net tonnage of the ship operated. The tonnage tax profit replaces both the tax-adjusted commercial profit/loss on a shipping trade and the chargeable gains/losses made on tonnage tax assets. Other profits of a company utilising the tonnage tax formula are taxable in the normal way. As a condition of acceptance for the UK tonnage tax regime, a company or group of companies has to agree to provide training for seafarers. According to the size of the fleet and the number of officers employed, the company will have to find or fund places for an agreed number of officer trainees. It will also have to consider measures to develop ratings.

Since the 1930s, various flag states have permitted an open register that can be used by owners from other countries. These offer the ship-owner lower costs (especially crewing), and low or zero corporate taxation. The main issue with these relates to safety, particularly whether the state offering the open register complies with various international conventions and enforces them. The International Transport Workers' Federation (ITF) has dubbed some open registers "flags of convenience". Ships so registered run the risk of refusal to load or discharge by affiliated dockers' unions, with the objective of encouraging ship-owners to implement the ITF Collective Agreement for seafarers' terms and conditions. The ITF head office is in London.

More than fifty organisations worldwide define their activities as providing marine classification. Ten of those organisations form the International Association of Classification Societies (IACS), based in London. Classification societies are organisations that establish and apply technical standards in relation to the design, construction and survey of marine related facilities including ships and offshore structures. These standards are issued by the classification society as published rules.

A vessel that has been designed and built to the appropriate rules of a society may apply for a Certificate of Classification from that society. A ship built in accordance with an IACS member's rules will be assigned a class designation by the society on satisfactory completion of the relevant surveys. For ships in service, the society carries out surveys to ascertain that the ship remains in compliance with those rules.

Classification societies are independent and self-regulating with no commercial interests related to ship design, building, ownership, operation, management, maintenance or repairs, insurance or chartering. In simple terms, flag states, insurers and charterers will all wish to verify that vessels are in class as an indicator of their quality and seaworthiness. Two other key self-regulatory bodies in London are

Lloyd's of London and the Baltic Exchange, both of which have already been described. The UK's Financial Services Authority also oversees Lloyd's.

Finally, the UK Government is a key regulatory player in the maritime services cluster, both directly and indirectly. The Department for Transport is directly responsible for UK shipping policy, as expressed in *British Shipping: Charting a New Course.*³ This document recognises that shipping has a particular importance to the UK:

- because of UK dependence on sea transport
- for the sustainable environmental benefits it offers and because of the safety and pollution risks if things go wrong
- to supply the UK's requirement for maritime skills in many sectors of the economy
- and, not least, for UK national security

A comprehensive strategy to secure the future of UK shipping is mapped out in the form of 33 inter-related measures. These are grouped under four broad headings: increasing skills; encouraging employment; increasing the UK's attractiveness to shipping enterprises; and gaining safety and environmental benefit. It is notable that there are only two measures under the category "increasing the UK's attractiveness to shipping enterprises", although the introduction of the tonnage tax pursuant to these appears to be having the desired effect.

The Treasury has an important and direct impact on the cluster. Many of the shipowners in London (and their representatives), who buy maritime services in the city, live there for business as well as cultural and historic reasons. The uncertainty surrounding the UK Government's treatment of their non-domicile tax status is causing some to consider repatriating their activities to competing overseas centres that are developing the critical mass and breadth of services required to service them. Piraeus and Singapore are examples. There is evidence of specific targeting of key organisations by senior government officials from competing clusters.

³ Department for Transport, British Shipping: Charting a New Course, December 1998 / modified November 2003

Box 1 The Foreign Shipping Community – Taxation

A UK-domiciled shipowner who controls a shipping company resident overseas is liable to UK taxation on its profits, whether or not these are remitted to the UK. In contrast, a shipowner who is domiciled abroad but resident in the UK is liable for UK taxes on his earned and investment income and capital gains remitted to the UK, but is not liable to UK taxation on profits which are earned by companies, including shipping companies, registered and resident overseas and which are not remitted to the UK.

The Government is considering the review of the residence and domicile rules to determine, inter alia, whether they successfully identify those with a long-term connection to the UK who have an obligation to help support the UK exchequer on the basis of their worldwide income. This potential review will take account of practice in other OECD countries. The Government published a background paper in April 2003 and confirmed in the 2004 Budget that it would welcome further contributions to the debate with a view to the publication of a consultation paper.

Should non-domiciled resident shipowners become liable for UK taxation on their worldwide income, there is likely to be an exodus of these shipowners to countries with a more favourable tax regime. The estimates of the Greek and non-Greek fleets at risk from a change to the taxation of the foreign shipping community gives a total of 100m. dwt of shipping, more than 1,100 ships, equivalent to, of the order of, 15 per cent of the total world fleet and with a gross value of about \$20bn. The total, 100m. dwt of tankers and bulk carriers controlled by the foreign shipping community, at risk from a change in the UK tax regime, compares to the fleet registered in the UK, 9m. dwt. Thirty families and groups of shipowners control about half the total fleet at risk.

Sources: HM Treasury and Inland Revenue, *Reviewing the Residence and Domicile Rules as they Affect the Taxation of Individuals: A Background Paper*, April 2003; Pratten, C. *The Contribution of the Foreign Shipping Community to the UK Economy and the Economic Effects of a Change to the Taxation of the Foreign Shipping Community*; A Report for the Baltic Exchange, Department of Applied Economics, University of Cambridge, 1st August 2002.

1.2.4 Support Services

The availability of timely and accurate information makes an important contribution to the maritime services cluster in London. It is, in essence, a competency based cluster that relies on the know how of the people working within it and communications between them. Information is the oil that lubricates the mechanism of the cluster.

The Baltic Exchange plays a key role in providing market information on freight rates for a basket of main shipping routes. Most big brokers offer wider research services to the cluster.

Although not wholly based in London, there is an important group of specialist maritime media and publishing companies. These provide a knowledge dissemination function within the cluster, and although this is accessible to people in all markets, the timely availability of information, and indeed the ability to influence the agenda, helps to inform the cluster. Key companies include Informa (publisher of Lloyd's List), Lloyd's Register – Fairplay (based in Redhill), and Seatrade (based in Colchester). Norwegian-based Tradewinds maintains an office in London.

There are a number of other research-orientated companies that specialise in research in shipping markets, notably Drewry and Ocean Shipping Consultants (based in Chertsey), which also provide important feedstock into the cluster. These and other companies provide commercial bespoke consultancy services.

The cluster also benefits from London's university departments and colleges that specialise in maritime services. Examples include City University, London Metropolitan University, and Greenwich Maritime Institute. Several industry bodies that have a significant role in the training and accreditation of qualifications for maritime professions are also based in London, notably the Merchant Navy Training Board, Institute of Chartered Shipbrokers, Institute of Logistics and Transport, and the Chartered Insurance Institute. It is notable that amongst the recommendations for *British Shipping: Charting a New Course*, a third of the 33 policy measures concerned increasing skills.

Another important supporting function is provided by manning and recruitment agencies that help to supply liquidity and flexibility in the labour pool.

Shipping is a world-roaming, information-intensive business (especially in the liner sector), requiring integration with all other elements of the logistics chain. Services related to information, communication and internet technology have obvious importance to shipping.

Of particular note is Inmarsat – the satellite communications company. Formed as a maritime-focused intergovernmental organisation over twenty years ago, it now serves a broad range of markets. Starting from a user base of 900 ships in the early 1980s, it now supports links for phone, fax and data communications at up to 64kbit/s to more than 250,000 ship, vehicle, aircraft and portable terminals, whose is growing by several thousand each month. The satellites are controlled from Inmarsat's headquarters in London, but it has regional offices in Dubai, Singapore and India.

1.2.5 Industry Associations

Finally, the Maritime Services Cluster acts as a magnet for both international and national associations that represent various sub-sectors of the cluster. Some notable examples include:

- International Association of Classification Societies
- Intercargo (dry shipowners group)
- Intertanko (tanker shipowners group)
- International Chamber of Shipping

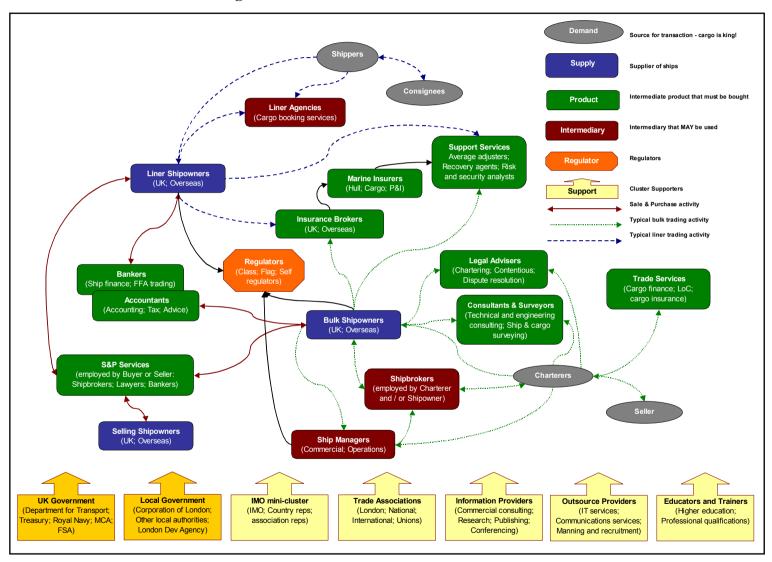


Figure 1.3 – Maritime Services Cluster in London

1.3 Interaction with Other Clusters

The maritime services cluster in and around the City of London is a subset of the wider maritime cluster in London and its environs. Some of the intermediate services (specifically those related to marine insurance, maritime law, and shipping finance) each form a niche market for a subset of the financial services cluster in London.

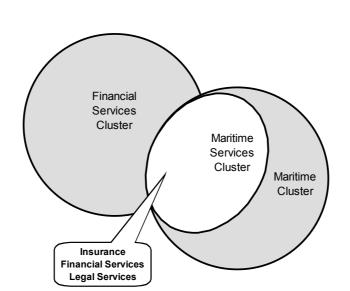


Figure 1.4 – Interaction with Other Clusters

In addition to maritime services, the other key elements of the maritime cluster include the Port of London; maritime heritage; marine leisure; and indeed river transportation. The relationship with the financial services cluster is apparent, but it is not clear to what extent this has been exploited. The sheer muscle of the financial cluster, combined with the high level of resources that go into maintaining this, offers significant potential for maritime services to piggyback by developing new products (e.g. maritime hedging instruments), and accessing London's deep capital markets. These links both offer opportunities to leverage value added in the development of the maritime services cluster.⁴

⁴ For more information see Corporation of London, *Financial Services Clustering and its Significance for London*, Loughborough University and Manchester Business School, February 2003.

2 Sizing the Cluster

This chapter analyses the maritime cluster to identify its characteristics in terms of size and composition. The chapter is structured in two sections:

- A summary of the findings based upon a top-down study by International Financial Services London (IFSL)⁵
- The findings of a bottom-up analysis of cluster composition undertaken as part of our work (cluster mapping)

2.1 Summary of IFSL Report

According to the IFSL report *Maritime Services* (Sept 2003), net overseas earnings of maritime services in London and the UK rose by 16% to £1,092m between 1999 and 2002, and maritime services form a key segment within London's status as an international financial centre. The major contributors in 2002 were the Baltic Exchange (£322m), legal services (£190m), insurance brokers (£170m), banks (£150m), and Lloyd's Register of Shipping (£100m), with P & I Clubs and publishing also making an important contribution. Adding £1.1bn overseas earnings from UK shipping, the combined net overseas earnings of maritime services and UK shipping totalled £2.2bn in 2002.

Key findings from the IFSL report are summarised below:

- The ship-owner client base includes foreign owners of about 20% of the world fleet who are represented in the UK. The London Greeks form the largest subgroup with at least 120 agencies employing over 1,500 people
- London's 460 ship-broking firms match ships and cargoes for 50% of the tanker and 30-40% of the dry bulk chartering business. Over half the world's new and second hand tonnage is bought and sold by Baltic members in a market worth over \$34bn annually. The total value of freight contracts traded in the over-the-counter derivatives market reached £3.5bn in 2002, a threefold increase since 1999
- London's share of marine insurance premiums fell from 24% of the world market in 1996 to 19% in 1999. Gross premiums in the marine market halved from £7bn in 1992 to £3.2bn in 2000. Notwithstanding this, London remains a key marine

⁵ International Financial Services London, *Maritime Services, City Business Series 2003*, September 2003.

insurance market, and is also the largest centre for P&I insurance. Around thirty firms of insurance brokers place the bulk of marine business

- Lloyd's Register of Shipping is one of the world's leading ship classification societies. However, it has lost market share and is now second to the Japanese society Class NK. Its marine income was down 11.2% in 2002/03 on previous year, with its share of world fleet reduced to 18.3% in terms of gross tonnage
- In ship finance, the loan book of £15-20bn provided by a dozen commercial banks in London accounts for 15-20% of the world book. Shipping finance written by UK banks is primarily for companies based in Europe
- London is the leading centre in legal services involving around fifty law firms. English law is the most widely applied to shipping disputes, often between foreign interests
- At least fifteen international organisations are also based in London, the most important being the International Maritime Organisation. A number of international professional institutions with significant overseas representation are also based in the UK

IFSL estimates that 14,200 people are employed in maritime services. Of this total, 4,200 work in ship-broking; 3,150 in insurance-related business; 2,500 in legal services; 1,850 in ship classification; and around 500 each in banking, accounting, publishing and international organisations.

2.2 Cluster Mapping

2.2.1 Introduction

We have undertaken a cluster mapping exercise to identify the size of the maritime services cluster in London. Based around the definition of the cluster in Section 1, we have defined fifteen categories of companies on which to base this exercise:

- Charterers
- Classification Society
- Consultants & Surveyors
- Ship Finance & Related Services
- Information and Communication Technology (ICT) Services
- Marine Insurance

- Marine Personnel
- Maritime Education and Training
- Maritime Legal Services
- Maritime Organisations / Associations
- Media and Publishing
- P&I Insurance
- Ship Agency and Forwarding
- Shipowners, Operators & Managers
- Shipbrokers

2.2.2 Methodology

The approach employed is bottom up and attempts to identify the number of companies in the cluster using various data sources. It uses a three-stage methodology that comprises:

- Identification of companies
- Review of data
- Analysis

This is different from IFSL, which used a top-down approach, but both methods are valid ways of trying to gain an appreciation of the maritime services cluster in London in light of imperfect data.

Various sources have been used to identify companies including:

- FAME (Financial Analysis Made Easy): This is a database sourced from Companies House data, and it thus contains only limited companies. It is searchable by location (Inner and Outer London) and by key words in both the title of the company and the companies' activities. Companies have addresses for their Registered Office and sometimes they also have trading addresses. We therefore searched also for companies that had registered offices outside London, but had a trading address inside London
- Trade association membership lists that are in the public domain. Particularly useful contributors have been Maritime London, the Chamber of Shipping, Admiralty Solicitors Group, International Underwriting Association of London, and Lloyd's Market Association

• Online databases and portals, of which the most useful has been the Fairplay World directory, which is searchable for companies in various categories in London

The list of companies has been reviewed to remove duplication and identify those that are involved in the maritime sector at least in part, and those that are not. As far as practical, this is achieved with reference to companies' web sites (e.g. underwriters) or their participation in an initiative (e.g. Joint Hull Committee).

The list is further screened to ensure that companies' data are not double-counted through being included both as a subsidiary and in a holding company. This is a tricky exercise that requires an element of judgement, because sometimes data for subsidiary companies appear to be aggregate, and sometimes not. As a rule, we generally list subsidiaries and not holding companies because this provides more detail in the exercise. Data are also reviewed to ensure that companies appear to be actively trading. Analysis is based primarily on the number of companies, their location (by postcode) within London, and their turnover.

Analysis of turnover is problematic because the financial data reported by FAME includes businesses that have taken advantage of the rules available to small companies (accounting relief as per the Companies Act (1985)). Such businesses only need file abbreviated accounts with Companies House which allows them to provide only basic balance sheet information rather than profit and loss/balance sheet data.

2.2.3 Results

We have identified an impressive 1,757 maritime companies or organisations that are listed by Companies House as having offices in London. Of these, 1,382 have their registered offices in London while the remainder have only a trading office there. **The results concentrate on those companies with registered offices in London** (Figure 2.1).

Category	Number of Companies
Ship Agency and Forwarding	336
Shipowners, Operators & Managers	206
Marine Insurance	193
Shipbrokers	143
Maritime Organisations / Associations	105
Maritime Legal Services	101
Consultants & Surveyors	98
Ship Finance & Related Services	62
Charterers	42
ICT Services	35
P&I Insurance	26
Maritime Education and Training	12
Marine Personnel	9
Classification Society	8
Media and Publishing	6
Total	1,382

Figure 2.1 – Companies in London Listed by Category

Maritime is of minor importance to major companies such as corporate insurers (e.g. Royal & Sun Alliance or Zurich) and banks (e.g. Citibank or RBS), although such companies are of significant importance to the maritime services cluster. There are numerous specialist service companies in insurance, legal services, consulting and surveying, ICT and personnel that conduct most of their business in the maritime arena. These work alongside other companies in the same markets that are generalists in the category (e.g. Clifford Chance or Marsh). There are some categories where all or nearly all of the activity is maritime-related for all of the companies, such as ship operators and managers, shipbrokers, ship agents and forwarders, maritime organisations and P&I Clubs.

An objective of cluster mapping is to identify the scale of the cluster in financial terms. There is little merit in trying to estimate sales for the insurance, legal services, finance and charterers categories, because maritime forms a relatively small share of the activities that are recorded by the financial data. The results for several sectors are shown in Figure 2.2.

Category	Number of companies reporting	Sales of companies reporting (£ m)
Shipowners, Operators & Managers	206	8,568
Ship Agency and Forwarding	336	551
Shipbrokers	143	188
Consultants & Surveyors ⁷	98	52
Total	783	9,359

Figure 2.2 – Estimates of Sales⁶

These values are for sales and not for value added. In relative terms we would expect services such as ship-broking, maritime law and consultancy to have a very high value-added component, whereas ship-owning/operation/management would be low value added as it is effectively buying in these and numerous other services.

Figure 2.3 details the top 25 companies for four of the key categories in the Maritime Services Cluster. The dominance of several companies within specific maritime sectors is apparent – notably P&O Nedlloyd, Carnival Cruises, and Hatsu Marine (sole shipping agent for Evergreen).

 $^{^{6}}$ These are based on the most recent sales figures reported – not from one consistent financial year.

⁷ We have made assumptions on the proportion of companies' activities attributable to maritime.

Figure 2.3 – Top 25 Companies by Sales (Companies listed by Companies H+ouse as having their registered office in London)

	Ship Agency and Forwarding	Sales	Shipowners, Operators & Managers	Sales	Insurance	Sales	Shipbroking	Sales
1	HATSU MARINE LIMITED	141,618	P&0 NEDLLOYD CONTAINER LINE LIMITED	2,906,344	MARSH LIMITED (Broker)	488,918	FURNESS WITHY (CHARTERING) LIMITED	42,437
2	DIAMOND TRADING COMPANY LIMITED(THE)	33,324	CARNIVAL PLC/ P&O Princess Cruises	1,577,673	Willis Ltd (Broker)	379,955	CLARKSONS	35,691
3	DENHOLM SHIPPING SERVICES LIMITED	32,048	PAN OCEAN SHIPPING COMPANY LIMITED	918,262	HEATH LAMBERT GROUP LIMITED (Broker)	227,900	BRAEMAR SEASCOPE GROUP PLC	26,762
4	KAWASAKI (LONDON) LIMITED	29,235	NORWEGIAN CRUISE LINE LIMITED	605,021	JLT RISK SOLUTIONS LIMITED (Broker)	153,450	E.A. GIBSON SHIPBROKERS LIMITED	11,814
5	CHARLES KENDALL FREIGHT LIMITED	20,012	MAERSK COMPANY LIMITED (THE)	542,791	HSBC INSURANCE BROKERS LIMITED (Broker)	122,073	HOWE ROBINSON AND COMPANY LIMITED	9,526
6	NYK BULKSHIP (EUROPE) LIMITED	17,329	UNITED ARAB SHIPPING COMPANY (S.A.G.)	437,734	ALEXANDER FORBES RISK SERVICES (Broker)	92,042	SEA SOTRA (LONDON) LIMITED	7,602
7	WOODBARNS LIMITED	16,036	SK ENERGY EUROPE LIMITED	223,035	MILLER INSURANCE SERVICES LIMITED (Broker)	51,888	GALBRAITH'S LIMITED	5,873
8	HULL BLYTH & COMPANY,LIMITED	12,268	FERRY AND PORT HOLDINGS LIMITED	96,014	CRAWFORD & COMPANY ADJUSTERS LIMITED	44,799	NIGEL BURGESS LIMITED	5,078
9	M & S SHIPPING (INTERNATIONAL) LIMITED	12,012	STOLT-NIELSEN TRANSPORTATION GROUP LIMITED	94,620	LIMIT UNDERWRITING LIMITED	40,546	INTERNATIONAL SHIPBROKERS LIMITED	3,557
10	FRED OLSEN AGENCIES LIMITED	11,569	SHELL INTERNATIONAL TRADING AND SHIPPING COMPANY	84,192	ISIS INVESTMENT MANAGEMENT LIMITED	39,861	MEDMAR SHIPPING LIMITED	3,314
11	THE EGGAR FORRESTER GROUP LIMITED	11,418	FRED OLSEN CRUISE LINES LIMITED	79,796	Arthur J. Gallagher	39,446	J.E. HYDE & CO. LIMITED	2,346
12	RIVER PLATE SHIPPING AND TRADING AGENCY LIMITED	11,347	PRINCESS CRUISES (SHIPOWNERS) LIMITED	77,020	Brit Syndicates	34,031	HARLEY MULLION & CO. LTD.	2,221
13	TRANSCAR PROJECTS LIMITED	10,428	BORCHARD LINES LIMITED	69,237	AXA CORPORATE SOLUTIONS SERVICES UK LIMITED	26,660	HSBC SHIPPING SERVICES LIMITED	1,979
14	CN SHIPPING LIMITED	10,254	CHEVRON TANKERS LIMITED	65,335	SVB Syndicates Ltd	20,494	POTEN & PARTNERS (UK) LTD	1,970
15	MOMART INTERNATIONAL PLC	9,645	NAVALMAR (UK) LIMITED	58,674	DENIS M. CLAYTON & CO. LIMITED	18,725	ROMAV LIMITED	1,746
16	ANGLO PACIFIC FORWARDING LIMITED	7,291	CHINA NAVIGATION COMPANY LIMITED(THE)	54,873	NEWMAN MARTIN AND BUCHAN LIMITED	14,668	BRIGHT COOK & CO (SHIPBROKERS) LIMITED	1,731
17	SIMARCO INTERNATIONAL LIMITED	6,210	BIDCORP SHIPPING LIMITED	50,222	PRENTIS DONEGAN & PARTNERS LIMITED	14,529	RIGEL SHIPPING LIMITED	1,481
18	BALKAN & BLACK SEA SHIPPING COMPANY LIMITED	6,023	PIL (UK) LIMITED	48,935	HISCOX SYNDICATES LIMITED	11,429	VSL SHIPBROKING LIMITED	1,453
19	NOVOSHIP (UK) LIMITED	5,222	P&O SWIRE CONTAINERS LIMITED	48,161	St Paul Syndicate Management Ltd	9,580	GASLINK BROKERS LIMITED	1,411
20	VOGT & MAGUIRE LIMITED	5,141	JAMES FISHER TANKSHIPS LIMITED	47,133	BRITISH MARINE MANAGERS LIMITED	6,311	PORTLAND MARITIME LIMITED	1,298
21	GRIMALDI AGENCIES UK LIMITED	4,753	SHELL TANKERS (U.K) LIMITED	35,033	Wellington Underwriting Agencies	6,116	HARRIS & DIXON SHIPBROKERS LIMITED	1,277
22	EVERGREEN U.K. LIMITED	4,573	STAR REEFERS UK LIMITED	29,628	Hampden Agencies	5,983	MASON SHIPBROKERS LIMITED	1,136
23	DER (TRANSPORT) LIMITED	4,375	P & O SCOTTISH FERRIES LIMITED	25,702	CTC MANAGEMENT LIMITED	5,697	Embiricos Shipbrokers	920
24	FRANCK & TOBIESEN (U.K.) LIMITED	4,156	GRACECHURCH CONTAINER LINE LIMITED	23,576	XL London Market Ltd	5,575	CENTURY CHARTERING (U.K.) LIMITED	823
25	FINNLINES UK LIMITED	4,037	OCEANARROW (UK) LIMITED	20,878	CHAUCER SYNDICATES LIMITED	5,165	GOBELL LIMITED	814
	Total Sales (£ m)	430,324		8,219,889		1,865,841		174,260
	Proportion of estimated sales for category	57.3%		93.7%	Notes: AON reports no data / excludes Zurich	85.4%		67.4%

(NB the sales value for insurance includes all turnover for companies active in the marine market (not just marine))

Figure 2.4 below offers a representation of the location of the companies and organisations in the cluster. This area is approximately 10 miles north to south, and 10 miles west to east. The key concentration of companies is clearly in the City, with the adjacent areas also being popular. In EC3, 146 companies are connected with marine insurance (49% of total). There is a hot spot in W1, which is an area particularly favoured by the London Greek community.

	Other NW: 26	NW1: 16	Other N: N1:			_	Other E: 6		
			WC1: 38	EC1: 82	EC2: 93				
Other W:	41	W1: 157	WC2: 53	EC4: 102	EC3: 298	E1: 99			
		SW1: 86		SE1: 72	2				
Other SW: 63					Other	se: 39			

Figure 2.4 – Geography of Cluster

2.2.4 Conclusion

The scale of the cluster is impressive. Some 1,382 companies have a registered office in London, and another 375 have a trading office in London. These are concentrated particularly around the City and in W1. The cluster has great depth, with numerous firms providing services in key categories. Many City firms have developed specialisms in maritime – notably legal services and finance. Some firms have expanded from their traditional maritime base into other products (e.g. insurers). The

shipping sector and the general insurance sector exhibit high concentration, with the top 25 companies accounting for 94% and 85% of the sales of companies identified.

Box 2

Benchmarks for Maritime Clusters

It is difficult to find any comparable data that enables one to gain an appreciation of how big or important the maritime services cluster in London really is. It is certainly the largest cluster of its type in the world. The following presents a range of data that gives an appreciation of scale against other research into maritime clusters:

- Finnish maritime cluster: estimated in 2003 to comprise 2,532 companies with a turnover attributable to maritime of €11.4 billion (includes shipping as well as ports and shipbuilding)
- French maritime cluster: estimates in Jan 2004 put turnover for shipping at €6.5 billion generated by 500 firms

Estimating the *value added* by the cluster is problematic. The value added for service industries is the difference between the value of a service provided (the output), and the value of the goods and services used up in providing that service (intermediate consumption). In the case of a shipping company, the intermediate services they consume are substantial – e.g. fuel, insurance, port services, inland transport etc. On the other hand, in the case of maritime law, for example, most of the service provided is value added. Selected data on value added are as follows:

- Port of London: a 2003 study identified turnover of £8.9 billion compared to GVA (Gross Value Added) of £3.4 billion, equivalent to 38% of turnover
- European maritime industries: estimated total expenditure of €159 billion in 1997, compared with value added of €70 billion, equivalent to 44% (for all of maritime)
- Netherlands shipping sector: the 1997 figures were production €14.9 billion and value added €7.8 billion direct plus €2.8 billion indirect value added
- German Shipping Sector: corresponding 1997 figures for Germany were €20.9 billion (production), €9.6 billion (direct value added), plus €4.4 billion (indirect value added)

3 Cluster Competitiveness – The Industry View

This section is based upon, and incorporates, the views expressed in some 50 interviews and workshops with key representatives in the industry, the results of a survey to which 99 firms responded, and specific comments made by respondents (shown in **bold**).

3.1 Common Themes

3.1.1 Advantages

Key strengths	Mean value
	(5 = very important, 1= not important)
Close to market-leading customers	3.59
Availability of market information	3.55
Strong and skilled labour supply	3.40
Close to firms supplying specialist services	3.34
Near to professional bodies	3.24
Knowledge transfer in the wider cluster mix	3.10
Proximity to an exchange or market place	3.03

Figure 3.1 – Key Strengths

London remains the pre-eminent maritime centre because it is in the unique position of having, as one respondent put it, "All the skills and expertise needed to support all sectors of the industry". Although not as deep as it was in the past, "Generally London still has the best core of people across all aspects of shipping at the moment."

In the survey, there was a strong feeling that London offers a high potential for professional development, with 66% ranking this as of first or second importance in recruiting and retaining labour. The issue of higher salaries, whilst having cost implications, was also seen as a positive factor, with 59% ranking it highly.

Whilst it is recognised that English is the international language and there are many non-natives proficient in it, there is still a premium placed on locating in an English language environment and having access to native speakers. "English is the main strength of London - together with the range of P&I, banks and shipping support etc. With English fast becoming the lingua franca of Europe and the world, London is the natural centre for European and world shipping."

The time zone was also frequently noted as a cluster strength, but this is more contentious in that there is a significant body of opinion that modern communications can overcome disparities in time and location. Related to this, over half of the survey respondents ranked highly the utilisation of technology and e-commerce as a key opportunity for their business in London.

A final common theme is the presence of the International Maritime Organisation, which represents a strength for London. It contributes to London's importance, drawing key people and organisations into the London maritime community.

3.1.2 Disadvantages

Competition is seen as a major threat. A majority of respondents to the survey (59%) believe that London will no longer be the world's pre-eminent Maritime Services Cluster in 10 to 20 years. One person said, "The London cluster as it is made up will simply fade away".

Many see the development of regional centres similar to London located where physical demand is growing, and where the public sector is specifically creating the conditions to encourage maritime services. Singapore, Shanghai and Hong Kong are seen as the major competitors in the long term. The reasons for this are reflected in the following sentiments:

"The balance of shipping business is now in the Far East. They have increasing fleets, increasing investment in shipping; supportive governments; and increasing local & international trade with development of the emerging nations."

"Government backing, good location, climate, living conditions, transport, can import and develop skills, good legal system, stable government (of Singapore)."

"The Chinese government gives its full support to Chinese flags and Chinese lines - a growing centre of business - for liner companies - cheap well-educated workers, and very close to one of the largest markets in the world in terms of volumes/tonnages etc."

London suffers from high property and salary costs, which are reflected in the prices charged for services, and its ability to compete with some overseas clusters. The cost of housing has an important impact on the attraction and retention of people. This was regarded as the key negative factor in recruitment and retention of labour: 72% of respondents ranked it of first or second importance.

Another weakness is London's overall transport infrastructure, with the current state of the Underground being consistently mentioned as a major disadvantage of London. **"Transport infrastructure - the big turn-off**." This links to people's quality of life and their wish to work in London. **"Conditions in the workplace plus transportation/communications have to be improved."**

London's airports provide good access to and from overseas locations, however respondents were critical about delays and difficulties in getting to Central London. This is a significant criticism given that accessibility and communications are meant to be one of London's key strengths. This came out clearly in the survey, where commuting and transport issues were considered of first or second importance by 71% of the respondents. As one participant said: **"The costs in London are high, the infrastructure is awful (it takes at least 1½ hours to get through Heathrow to the City), and the availability of flights to some other shipping centres is not geared to the working day"**.

The survey shows that potentially unfavourable UK tax measures are considered a key threat to the robustness of the maritime services cluster in London: 57% of respondents ranked it first or second. Several people drew parallels with New York, where some 30 years ago the foreign ship-owning community rapidly dwindled

following changes in their taxation. Although not everyone agrees with the conviction expressed here, this issue was one of the most frequently mentioned.

The role of Government is regarded as important to the future of the industry. "A comprehensive policy on maritime affairs by both central and local government would help give some longer term stability to employment, and the role of London world wide."

The importance of the previous two issues is clearly reflected in the findings of the survey. This showed that London ranks the highest for all but two aspects of cluster competitiveness:

- Having tonnage owned or controlled in the cluster (where it came 4th)
- Having a supportive government (5th)

There was a consistent view on the need for the industry to improve its image reinforcing the thrust of the Sea Vision initiative. "Even in this bull market, shipping has no public profile, no kudos, no identity outside the business."

3.1.3 Themes Common with Other Industries

The common themes throughout the interview programme and survey fall into two categories:

- Those that affect all industries in London
- Those specific to the maritime services cluster

The negative issues that affect all industries include transportation around London and to airports, and the high cost of office space and personal housing. These findings are highly consistent with research conducted for other industries in London. Although in a different context, lack of government support is also cited as a threat to other industries. For example, a review of the financial services sector⁸ concluded that the key threats to London were:

- The high cost of premises
- The quality and reliability of transport
- Government complacency/lack of policy coordination

The report also identified that the key advantages of London were its labour market, the personal relationships that develop, and proximity to customers (and other parts of the services supply chain). These also echo our findings for the maritime sector.

⁸ Corporation of London, *Sizing Up the City – London's Ranking as a Financial Centre*, Centre for the Study of Financial Innovation, June 2003; See also: Corporation of London, *Financial Services Clustering and its Significance for London, op cit.*,

3.2 Survey Results

3.2.1 Strengths

Future growth

There is optimism for the future growth of maritime business in London. 80% of respondents to the questionnaire considered that the potential for the growth of London firms in their sector is moderate or high, and 85% have high or moderate optimism about the growth of their own business in London.

The market

The strengths that the respondents derive from being in London are largely attributable to the maritime cluster. London acts as a focus for market-leading customers; there is good availability of market information; a strong and skilled labour force; they are close to other firms supplying specialist services and to professional bodies; there is knowledge transfer and proximity to an exchange or market place. These factors were all ranked highly in questionnaire responses.

When questioned about the strategies that are important to the future of their business, the respondents strongly agreed that differentiation (i.e. providing leading quality of product or service) is paramount. The establishment of a market niche was also ranked highly, as were the development of alliances and the joint provision of services, both of which can most effectively be achieved within a large marketplace.

Skills

A highly skilled labour supply is essential to ensure that a company can deliver high quality services, and heavy investment in skills and knowledge was regarded as the second most important strategy for the future of the business. This was also seen as a significant strength of being in London. Skills and expertise were also ranked highly as important in overcoming weaknesses. It is not clear, however, that skills are seen as a weakness per se, but this finding is interpreted as meaning that yet more investment needs to take place, and new talent needs to be nurtured, to ensure that firms are able to remain competitive.

3.2.2 Weaknesses

The questionnaire asked respondents to rank the factors that would be important in overcoming weaknesses and improving their competitive position. Of these, the need to avoid complacency was seen as of overriding importance: over half of the respondents ranked this first or second highest. The cluster must remain at the forefront and competitive, and this ties in with the need to develop a larger pool of the skills and expertise mentioned above. Other key areas for overcoming weaknesses included making professional bodies and associations more effective; paying greater attention to innovation; and increased collaborative working with other companies.

3.2.3 **Opportunities**

The key opportunities in London were related to building on the current business and remaining up-to-date and innovative, but also developing the cluster approach to working together with other firms. The highest ranked opportunities were:

- Doing better at what firms do now
- Utilising technology and e-commerce
- Developing new services
- Developing new geographical markets
- Development of skills and training programmes
- Collaborative working with other firms

Partnership working with the public sector and greater public sector support were not regarded as major opportunities. It could be argued that this is clearly a major opportunity, and its absence illustrates the lack of engagement that the public sector has had with the cluster.

3.2.4 Threats

- Costs: the cost of business premises and of employees' homes
- Competition: from centres overseas. The major competitors for their sectors were ranked as the US, Norway, Hong Kong, Singapore and Germany
- Transport and communications: local and national transport infrastructure and services; international transport links; and communications infrastructure
- Regulatory developments
- Poor sector image: inability to attract young people

3.2.5 Factors for Competitiveness

There was a united belief among the respondents (98% answered 'yes') that London is currently the pre-eminent maritime services cluster. 85% were confident that it would remain pre-eminent in 5-10 years' time, but the outlook beyond that is more uncertain with only 41% considering that London would retain its current status in 10-20 years' time. The key factors for determining the competitiveness of a maritime services cluster were ranked as follows (in order with their mean score out of 5).

٠	The presence and depth of intermediary services	3.71
٠	A pool of skilled labour	3.58
٠	Comprehensive availability of services in the supply	3.37
	chain	
٠	A supportive government	3.30
٠	Location of market places	3.23
٠	Physical proximity of shippers and charterers	3.16
٠	Tonnage owned or controlled within the cluster	2.91
٠	The presence of regulatory bodies	2.67
٠	Other	0.03

The respondents were then asked to compare London with other leading maritime services clusters against these criteria. The detailed scores are given in Appendix A and the rankings are summarised in Figure 3.2.

	London	Hong Kong	Norway	Singa- pore	Piraeus	New York	Shang- hai	Frank- furt	Dubai
The presence and depth of intermediary services	1	3	4	5	6	2	7	8	9
A pool of skilled labour	1	3	2	4	5	6	8	7	9
Comprehensive availability of services in the supply chain	1	2	3	5	6	4	7	8	9
A supportive government	5	2	3	1	4	8	6	9	7
Location of market places	1	2	5	4	6	3	7	9	8
Physical proximity of shippers and charterers	1	2	5	4	3	7	6	9	8
Tonnage owned or controlled within the cluster	4	3	2	5	1	7	6	8	9
The presence of regulatory bodies	1	5	3	4	6	2	9	7	8
Total score	15	22	27	32	37	39	56	65	67

Figure 3.2 - Ranking against key criteria

(1 = highest and 9 = lowest)

London emerges as the leader in all areas except for 'A supportive government' and 'Tonnage owned or controlled within the cluster'. London came first in the top three criteria given above, but the support of government was the fourth criterion and London came fifth on this point. Hong Kong ranks second overall and Norway, perhaps surprisingly, third. Singapore was thought to have the most supportive government and Piraeus the highest tonnage owned or controlled within the cluster.

Over 95% of respondents attributed the competitive strength of the London maritime services cluster foremost to the need to build and maintain personal contacts and the sheer pool of knowledge in the city. Also considered important was the ability to

have face-to-face contact. The cluster also makes it easier to build common values and trust, and facilitates informal interaction between clients and collaborators. On the skills side, there is a strong pool of skilled transferable labour and this also makes it easier to assemble multi-disciplinary teams.

Favourable UK Government tax measures were not considered to be particularly important in contributing to the robustness of the London maritime services cluster, either because they were not regarded as favourable or they were not thought to be a significant factor. On the other hand, unfavourable tax measures were deemed to be the factor most likely to be important in eroding the robustness of the cluster.

All the factors listed in the questionnaire as having the potential to erode London's robustness were considered significant. The key competitive threats, however, lie in:

- Competition from overseas: through the strong investment by other governments in competing maritime industries; and the physical growth of centres for trade and shipping in the Pacific
- Skills and labour costs: London risks losing competitiveness in labour costs and needs to ensure sufficient numbers of people enter the UK labour pool with seafaring training, something that is becoming more important as educational standards in India and China continue to rise

Recruitment and retention of staff

Skills and experience have been consistently regarded as important in the survey responses. They are held to be a strength of London at present, but there are concerns that the pool of expertise needs to be expanded and new people have to be attracted into the sector if the city is to maintain its competitive edge. On the positive side, London offers good potential for professional development and pays higher salaries than other locations. Respondents also thought it was important to have informal recruitment channels e.g. through clubs and contacts and considered the training and skills programmes in London to be a positive feature.

On the negative side, the cost of private housing in London was thought to be high compared to other locations; there are commuting and transport issues; and the lifestyle and personal taxation were considered more attractive elsewhere.

Centres most likely to usurp London

Respondents were asked to rank the centres most likely to usurp the position of London, no matter how unlikely they considered this to be. The weighted scores placed Singapore as the first choice followed by Shanghai, Hong Kong and New York (see Appendix A). Figure 3.3 gives the percentage of respondents ranking each location most likely to usurp London, and their reasons.

It is interesting that the growth in trade and tonnage in the Far East is frequently cited as a reason why the ports of Singapore, Shanghai and Hong Kong are most likely to provide a threat to London, and yet the location of market places and the tonnage owned/controlled within the cluster were not regarded as the most important factors for competitiveness. Nevertheless, attracting more tonnage under the control of London was regarded as important for the future.

Centre (ranked highest only)	%	Reasons (where given)
Singapore	22%	• Growth in regional economies leading to growth in
		trade/tonnage in the Far East
		 Commitment and backing of government
		• Lower costs, well-educated labour force
		• Good living conditions and infrastructure
Shanghai	21%	• Growth in Chinese/SE Asian economies and growth in
		maritime trade in a highly populous and developing
		region
		• Movement of shipping to Far East: ship ownership,
		increasing fleets and investment in shipping by
		governments and private sector.
		 Supportive governments
		 Cheap labour costs
Hong Kong	10%	 Volume of regional trade
		• Established maritime cluster, well-equipped but
		expensive
New York	9%	• Growing US shipping and strength of economy
		 Financial and business services
Dubai	8%	• Government strategy and support, massive investment
		• Quality of life
		• Cost of labour, ease of business
Piraeus	7%	Maritime community
Norway	4%	Government support for cluster
		 Rising influence
Frankfurt	2%	
None	1%	
No response	16%	

Figure 3.3 - Which Competing Centre is Most Likely to Usurp London?

Measures to maintain London's pre-eminence

The key measures that could be taken to maintain London as a pre-eminent maritime services cluster were ranked as follows (in order with their mean score out of 5):

•	Greater attention to competence, skills and knowledge	3.80
٠	Promotion of maritime careers to attract young people	3.63
٠	Businesses in London working together	3.62
٠	More support from central government	3.48
٠	Attracting more tonnage under the control of London	3.29
٠	More focus on innovation and R&D	3.07
٠	Following the one-stop shop approach through expansion or	2.01
	alliance	3.01
٠	Rationalisation to larger companies with a lower cost base	2.95
٠	Creation of a national maritime college	2.84
٠	Opening offices overseas	2.76
٠	More support from local government	2.67
٠	Other	0 16

The most important measures lie in the areas of skills and recruitment, particularly for young people, although the creation of a national maritime college was not considered a high priority. The second area of measures concerns encouraging businesses in London to work together more, and to a lesser extent being able to offer a one-stop shop which can only be achieved through businesses expanding or working together.

Governments in some emerging competing centres play a more supportive role, and engaging greater support from central government was regarded highly as a measure to maintain London's position in the future. Curiously, however, local government support was not ranked particularly high.

3.3 Summary of Key Issues

Based on the interview programme, the key strengths of the cluster include:

- Shipping is alive and well in London. The ships are not necessarily owned or flagged in the UK, but London hosts the European HQ of many global container lines, a significant tanker fleet, and commercial management of many bulk ships (primarily through representatives of foreign owners resident in London)
- Shipbroking firms in London are a mainstay of commercial shipping activity and in size, professionalism and service are unequalled elsewhere in the world
- Worldwide P&I Club activity (mutuals for ship-owners' protection and indemnity insurance) is heavily focused on London, and is a difficult sector for competitors to replicate
- While Lloyd's of London has lost ground in hull insurance, it still has the size, spread of capacity, specialist expertise and innovation to remain a leader in marine insurance
- English Law, Courts and Admiralty Solicitors are held in high regard worldwide and represent a key asset of the London maritime services cluster
- The International Maritime Organisation (IMO) is a major institutional presence and forms a significant component of the cluster
- The level of regulation by the Financial Services Authority is possibly about right

 those interviewed who consider it an asset match complaints about overregulation

The key weaknesses identified are:

- The cluster does not gel, partly because of its size, perhaps because of the large number of representative organisations, and also because it has never before had to work collectively
- The public sector and the private sector have yet to form a real partnership that recognises the value that each derives from the cluster (unlike all London's main competitors)
- Notwithstanding the support that has actually been given, there is a widely held view that the public sector does not sufficiently understand the industry or give it enough support

The main **opportunities** are:

- Focusing on competence, skills and the recruitment of bright people into the industry against a campaign to improve its image
- Greater cooperation amongst firms in the cluster, and the associations that represent them, to try and satisfy both their own objectives and those of the cluster as a whole
- Improved support from government to put maritime services in London on the same footing as its overseas competitors
- Engaging strategically with other maritime cities and clusters, and expansion of businesses by opening up offices overseas
- Focusing on innovation and novel developments, maximising synergy with the wider financial services cluster in London

The key **threats** are:

- The ship-owning base in London is declining with new entrants to the market preferring to operate vessels from Piraeus, Hamburg or even Geneva, with the threat that maritime services will follow them
- The cost of doing business in London in terms of salaries, rents and the level of professional fees that result, and the poor quality and high price of public services, particularly transport. Jobs have been lost from London and the UK as a result
- Opinion is united that there are significant threats from competing or emerging centres. Singapore, Shanghai, Hong Kong and Piraeus are frequently cited
- Many of London's intermediate and support companies are developing businesses in competing clusters overseas. This results in knowledge transfer, which eventually offers potential for nationals of competing clusters to set up in competition with London
- A majority of respondents to the survey (59%) believe that London will no longer be the world's pre-eminent maritime services cluster in 10 to 20 years. Many see the development of regional centres similar to London located where physical demand is growing, and where the public sector is creating the right conditions

4 Sector Competitiveness

This section deepens the review. It is structured to address the competitiveness of the five key sectors, and the components that inhabit these, by considering:

- The key trends and issues affecting each sector
- The competitive position of London for each sector in the form of a SWOT analysis, based upon research findings
- Conclusions that can be drawn from this analysis

This section is based on the actual views of people in the individual sectors.

4.1 Shipping

4.1.1 Charterers

Trends and Issues

London has an active chartering sector due to the historical strength of the sector coupled with the presence of major cargo principals, particularly in the oil and coal trades, and the major commodity trading markets. The principal drivers for the sector are the supply of vessels for charter and the international and domestic demand for ore and energy. The charterers both support and are supported by an active ship-broking sector. While charterers benefit from the presence in London of ship-owners, foremost being the London Greek shipping community, by no means are all the vessels chartered from London-based ship-owners. Norwegian ship-owners are also major suppliers to charterers and are particularly strong in the tanker sector, not least due to the tax regime and other support by the Norwegian Government.

Freight rates have recently achieved record levels, mainly due to strong demand in China. This has benefited both charterers and ship-owners alike, although this has been tempered by similar price increases in commodities carried by the vessels, placing pressure on margins. There is however some nervousness about the future of the London Greek shipping community and the threat that remains in respect of their non-domicile tax status. The concern is that should the Greek ship-owners leave London, as they did New York in the 1960s when similar tax changes were introduced, they would be followed by the chartering sector or at least an erosion of the sector.

SWOT Analysis

The strengths that the sector derives from London are the presence of ship-owners and an active and efficient ship-broking sector. A further strength is the proximity of maritime lawyers, arbitrators and mediators. The presence of cargo insurers is also a benefit. One major charterer described it thus: **"London is convenient, with a magical combination of people just a taxi ride away"**.

The weaknesses are principally the costs of doing business in London, not only in terms of premises and staff, but also in respect of the charges raised by providers of maritime services. Bulk shipping essentially entails low value cargos and narrow margins, and is therefore particularly price sensitive.

Opportunities are based around the depth of maritime services, and the potential for marketing this to increasingly global business as a key factor determining the location of their chartering operations.

The threats to the chartering sector relate to the forecast long-term shift in economic activity from the Atlantic to the Pacific Rim. This is a relative threat in that cargo volumes will continue to grow in the west but at a slower rate than in the east. A further threat is the departure of the London Greek shipping community, which would adversely affect chartering in London. Taken together, these factors would favour Shanghai, Piraeus and, for the oil trades, Houston.

Conclusions

The chartering sector is robust due to the buoyancy of the UK and world economy and can be expected to remain so in the short term. Its threats come mainly from the costs entailed in doing business in London and from the uncertainty surrounding the continued presence of the foreign ship-owning community. The health of the sector relies on the presence of ship-owners and on the quality and price of intermediary and support services. While the quality of these services is not in dispute, their prices certainly are and an increase could have a detrimental impact on the sector.

4.1.2 Ship-owners, Operators and Managers

Trends and Issues

Ship-owners, operators and managers fall into two main categories; those concerned with the bulk trades and those running liner shipping operations. While in tonnage terms bulk shipping is far the larger, in revenue terms the reverse is the case with liner shipping operations accounting for approximately two thirds of the overall revenue from shipping. The major issue for both sectors, however, is the cost of purchasing and operating ships. The cost of ownership has been simplified and reduced by the tonnage tax regime whose introduction has increased the UK fleet by between 100 and 150 ships. However, in shipping, the ownership, flag registration and location of management of vessels can be geographically separate. The presence of owning or managing operations is more significant to a maritime services cluster than capturing flag registration.

With regard to bulk shipping, there is a trend to move technical and ship management operations out of London and the UK to places such as Piraeus, principally on grounds of cost, only retaining a commercial function in London. London is, however, still valued as a commercial centre for shipping businesses due to the strength of the ship-broking sector and other maritime support services.

In liner shipping operations the considerations are similar, with access to banking, ship-broking, legal and other support services given as the main criteria for locating in London. Liner shipping companies, however, do not rely on shipbrokers for cargo but maintain their own agency operations and commercial relations with major importers and exporters, not all of which are London-based. As members of consortia, activities such as ship planning (i.e. the management of vessel deployment) tend to move internationally irrespective of the location of the company's commercial operations.

SWOT Analysis

The principal strength that ship operators and mangers derive from a London location is the proximity of high quality intermediary and support services. For liner shipping companies the ease of access to the European Commission in Brussels is also a factor given the competition issues related to Liner Conferences, many of which are also administered from London.

The principal weakness of London is its cost as a location and its services. In comparing London with other maritime centres, one ship-owner noted that **"Piraeus is cheaper and Singapore considerably cheaper, but they cannot compete on quality of service yet"**. For example, in August 2002, the European Headquarters of Mitsui OSK Lines (MOL), moved from London to Rotterdam citing costs and the quality of public transport among the reasons for its move.

Opportunities for the development of the shipping sector possibly rest on the UK developing a positive taxation regime designed to encourage investment in shipowning (see below). There is also a feeling of isolation amongst Norwegian Shipowners due to Norway not being in the EU. Some are understood to be thinking in terms of establishing themselves in London.

The main threat to London's ship-owning and management sector is the uncertainty over the future taxation of non-domiciled resident ship-owners, which could cause an exodus of these ship-owners from London. A further threat is the ship financing advantage offered in Germany using Kommanditgesellschaft Funds (KGs), which offer particular tax advantages for ship purchase and which have assisted the Hamburg maritime cluster and German ship-owning generally. These funding arrangements have been credited for increasing the German fleet by 600 vessels, four times the increase in the British fleet attributed to Tonnage Tax. Similar schemes operate in Norway, the Netherlands and France. These funding arrangements are in addition to Tonnage Tax Regimes, which also operate in these countries.

Conclusions

While liner shipping operations appear relatively secure in a London location, cost pressures have been a factor in the departure of at least one major company. The bulk carrier sector is somewhat less secure with the departure of non-commercial management operations now a regular feature and the remaining threat that non-domiciled resident ship-owners will leave London due to uncertainties as to their future tax liabilities. A further issue is the preferential tax treatment in Germany and Norway that could draw companies away from London.

4.1.3 Shipbrokers

Trends and Issues

London shipbrokers are a mainstay of commercial shipping activity and in size, professionalism and service are unequalled anywhere else in the world. They have undergone significant consolidation in recent years and there have been major improvements in efficiency resulting from a shortening of the broking chain, to the extent that one broker might now represent both parties in the fixing of a vessel. They have also been innovative in respect of their products and have developed the market in Forward Freight Agreements (FFAs) as hedging instruments against future fluctuations in freight rates. Shipbrokers are also major contributors of market information, both through their own research departments and through their input to the Baltic Exchange's freight indices.

Given that the London maritime services sector is relatively mature, many shipbrokers are adopting a strategy of expansion by opening more offices overseas and expanding their range of activities domestically. Recent examples are the purchase by Braemar Seascape of Cory Brothers shipping agency and Clarksons' expansion into shipping logistics. Other strategies include broadening the range of services offered to clients such as acting as an outsourced logistics solution for principals. In the longer term it is possible that growth of the market in FFAs will impact on the role of shipbrokers. Their role may be undermined in respect of forward Contracts of Affreightments (i.e. contracts to carry goods over a specified future period) by the activities of the FFA brokers, although their spot business would not be affected. This and other factors, such as financial regulation and money laundering controls, will serve to consolidate further the ship-broking sector.

SWOT Analysis

The strengths that shipbrokers draw from a London location are the proximity of the banks, legal services and cargo principals. Another strength is the presence of large institutions such as Lloyd's, the Chamber of Shipping and the Baltic Exchange, which deliver data and information to allow companies to develop market prices.

The perceived weaknesses of London are the costs of the location, the lack of liquidity in the FFA market and a tendency to risk aversion by some within the sector, who have been described by one senior shipbroker as **"Non-risk takers who are comfortable on fee income ... they sit on their coat tails and will not invest or innovate"**. A further problem is the increasingly restricted flow and exchange of information in response to the high level of competitiveness in the sector.

Opportunities for the sector come in a variety of forms. Coal and oil trading companies are increasingly based in the UK and London, and represent an emerging market opportunity. Other opportunities exist in expanding the range of services offered to customers; in diversification; and in overseas expansion.

The main competitive threat to activities in London is seen as the rise of other centres such as Shanghai and Piraeus. The former is seen as a long term threat as it becomes a larger player in the dry cargo business and the latter is linked with the threat of the departure of the Greek shipping community due to tax uncertainties.

Conclusions

London shipbrokers are currently benefiting strongly from the high freight rates and demand for shipping fuelled by China's imports of raw materials. They show the ability to react positively to market demands and to innovate where required. The leading companies in the sector are also showing willingness to expand outside their traditional activities and are turning themselves into more broadly based shipping services companies. The threats to the sector are treated as opportunities and the larger firms are investing heavily overseas in order to retain and develop their market share. While there will remain a number of specialist and niche shipbrokers, the process of consolidation of the sector into a smaller number of larger firms is set to continue.

4.1.4 Liner Agencies

Trends and Issues

There has been considerable consolidation in the liner agency sector in recent years as liner shipping companies have increasingly taken the function in-house in the form of wholly-owned subsidiaries. As such they are essentially tied to the policies and practices of their parent companies in terms of location and activities. This trend is a reflection of the general consolidation within the logistics chain due to containerisation and the way in which the liner shipping companies increasingly directly do business with either the principal or the groupage operator rather than using agencies as intermediaries. At the other end of the agency spectrum are the freight forwarders who are located in London due to it being either a source or destination of cargo and who also use road and air transport as modes. In the middle are a small number of firms that generally combine agency work with ship-broking and logistics activities, particularly within specialist markets.

SWOT Analysis

The strengths of the liner agency sector reflect the strengths enjoyed by the liner shipping companies themselves, and a London location allows them ready access to principals located in London. London also provides access to market information.

The weakness is in terms of the cost of London as a location and the lack of independence of many of the agencies, which makes them vulnerable to decisions by foreign parent companies regarding location.

Opportunities mainly relate to the development of an improved range of services that can be offered, notably the development of broader logistics services.

The threat to the business is the strength of the liner shipping companies themselves and their direct commercial relations with their customers. This places the liner agency sector in a relatively precarious position.

Conclusions

The liner agency sector is of diminishing importance within the maritime transport chain as its role is being taken over more and more by the liner shipping companies themselves who deal directly with the major manufacturers and importers. This is the natural consequence of containerisation and the growth of logistics technologies that exploit unitisation and information technology to shorten the transaction chain, and the strategy of liner shipping companies to develop as integrated logistics companies.

4.2 Intermediate Services

4.2.1 Marine Insurance

Trends and Issues

The prime components of London's marine insurance sector are the insurance companies, brokers, underwriters and P&I (Protection & Indemnity) Clubs. The two main markets are Lloyd's of London and the London Insurance Market (the "companies market").

Marine insurance has suffered from low profitability in recent years and, unlike aviation and non-marine insurance, has not experienced the necessary increase in rates in response to terrorist threats to return it to a healthy level of profitability.

Lloyd's has been through a number of radical changes in recent times with a dramatic consolidation of syndicates which have reduced in number from more than 250 three years ago to 66 today and it is also now doubly regulated with regulation by the Financial Services Authority in addition to its traditional self regulation. Lloyd's has been investing heavily in information technology to improve business processes, although interviewees questioned whether improvement or cost savings have resulted. Marine insurance accounts for approximately 13% of Lloyd's business, and although it is a mature business, there remains scope for innovation.

The insurance broking sector in London is dominated by a small number of large multinational brokers three of which - Marsh, Aon and Willis - are US firms and in all it is a sizable sector employing around 30,000, although the number employed mainly or wholly on marine insurance would be much less. The Lloyd's underwriting market

is serviced by accredited Lloyd's insurance brokers, of which there are 165. Recently, Lloyd's have been accrediting overseas brokers and opening overseas offices in order to expand their market opportunities. While this provides choice in the market, there is concern from all parties as to the dominance of the major brokers and their strength in the market.

The P&I Clubs provide insurance cover to shipping companies for those risks not covered by hull and cargo insurance, with cover for third party liabilities, legal defence costs and war risk. They operate as mutual insurers, pooling risk and sharing reinsurance costs, and have dispensation from the European Commission to do so, on the basis that they compete on service and productivity. The FSA regulates them.

The marine insurance sector contains a number of specialist support services including average adjusters, P&I correspondents, recovery agents and risk analysts. The body of experienced maritime lawyers also support the insurance sector. Shipping security is important: the IMO International Ship and Port Facility Security (ISPS) Code came into force in July 2004, and security issues, risk management and risk analysis are growing features of broader marine insurance activities.

SWOT Analysis

The strengths of London as a location for marine insurance include its size and capacity, access to high quality maritime legal and arbitration services, and communications and access to firms in the sector. Another strength is the long-term management information it holds due to the international leadership London has shown in the past.

Lloyd's is the second largest commercial insurer in the world and the sixth largest reinsurance group. It benefits from a culture of internal competition coupled with the sharing of information and risk. A particular strength of the Lloyd's market, and London, is the access of brokers to underwriters, and a leading underwriter commented that **"in doing insurance business communicating at a distance is not sufficient, it is not trusted, one needs to have eye-to-eye contact"**.

The main weakness of London is the cost of doing business added to which are the newer costs of regulation by the FSA. The insurance sector is now being regulated by the FSA due to the implementation of the EU Insurance Mediation Directive 2002. Regulation costs entail an initial application fee, which ranges from £5,000 for a Lloyd's Managing Agent to £25,000 for a general insurer followed by annual fees based on premium income, and are in addition to the operational costs of compliance, which are significant. These additional costs adversely affect the rate of return of marine insurance. A further weakness is the speed of (i.e. delays in) settlement of claims.

It has also been commented that there are too few lead underwriters, i.e. those which accept the initial risk which is then laid off to others, and that the London marine insurance market has a reputation for arrogance. While this has been disputed, it remains a common perception.

The opportunities for the sector in London arise from its size, which is large enough to develop specialist and niche segments. A growing market opportunity is risk management, which is knowledge based and therefore a barrier to entry by overseas competitors, and exploits the resource of the very large amount of information held by the sector in London. Lloyds could expand its market share if it improved its credit rating (currently an "A").

The threats to London's maritime insurance sector are both internal and external. An internal threat is the dominance of the major brokers which could possibly distort the market should they act too much in respect of their self-interest. A further internal threat is the withdrawal of capital should marine insurance be unprofitable. External threats come from the maturing of insurance markets in other centres and the trend for cargo insurance to be placed locally to the shipping operation, although hull insurance is still placed with Lloyd's underwriters.

Conclusions

The London maritime insurance sector has suffered from a long period of poor profitability and as a result has let the most unprofitable business go. This has entailed a loss of world market share, which has been criticised in consequence but is defended by underwriters, one of whom said that **"market share is not a measure of success - disciplined management includes the ability to walk away from underpriced risk"**. As a result the retained business is now profitable and second only to the energy insurance sector. The sector has reformed itself and is investing in new technology, although this has yet to lead to a reduction in costs. The sector has considerable resources, particularly of information, and new products are appearing exploiting these resources. Overall costs of doing business remain the major problem.

4.2.2 Legal Services

Trends and Issues

Maritime legal services in London benefit from the fact that English law is the most widely used legal system in the maritime industry worldwide and that there are dedicated specialist courts, the Admiralty Court and Commercial Court, for dispute resolution. The sector has two main constituents, maritime solicitors and maritime arbitrators.

Admiralty solicitors deal with contentious work and non-contentious work interpreting maritime conventions and statutes such as IMO Conventions, but their scope has expanded more recently as the FSA extends its regulation to insurance intermediaries as it implements the EU Insurance Mediation Directive 2002. In recent years there has been a slowdown in contentious work due in part to fewer casualties resulting from considerable work by ship-owners and others in raising standards. There has also been a recent trend for P&I Clubs to do more legal work in house, which has reduced the volume of work for Admiralty solicitors' firms. The two processes are connected in that the P&I Clubs tend to recruit maritime lawyers when there is less competition for these from private practice.

London's maritime arbitrators offer a dispute resolution service that replaces the need to go to court. It is informal and quick when necessary, although there are concerns that it is slower, and certainly more expensive, than it should be.

SWOT Analysis

The strengths of the maritime legal services sector, and its London location, are that London, the centre of English law, provides access to the judicial structure and legal system that offers a sophisticated maritime legal process. Other strengths include a reputation for consistency, experience, integrity and impartiality. London also provides access to complementary services, such as the banking sector, and has ready communications with the rest of the world.

The principal weakness of the sector is overwhelmingly seen as cost. These costs include solicitors' and barristers' fees as well as the general costs associated with a London location. A further perceived weakness was the slowness of the legal and judicial process (although it is possibly quicker than in other judicial centres).

In general, the opportunities for the sector are driven by the volume of new laws, regulations and conventions that come into being, such as the extension of FSA regulation to insurance intermediaries. Mediation is a growing opportunity that offers a concept akin to the early days of arbitration, which has itself become increasingly judicial in style. Apart from this, there are few identifiable opportunities for maritime lawyers to extend their services.

The current threats come from maritime centres that operate under English law, particularly Singapore and Hong Kong, or which have established arbitration services, such as New York. The threat from Singapore is seen as less serious than it might be, as it has protectionist policies in advocacy (as does Piraeus) that limit its attractiveness, and otherwise does not have a reputation to equal London. Hong Kong is also a more limited threat in that there are concerns about the potential for interference in the judicial process by the Chinese government. Should these concerns be allayed, and as the centre of gravity in world shipping shifts to the Far East, Hong Kong has the legal resources and potential to offer a far more serious threat.

Conclusions

The maritime legal services sector in London has the benefit of a strong reputation for experience, professionalism and impartiality and therefore a quality of service that is still attractive to clients. It is also underpinned by a legal system that is trusted worldwide. These two major advantages must be set against the costs of the services provided, which are a major cause for concern within the profession. While the threat of other judicial systems gaining a reputation equivalent to that of London is still remote, the threat of losing business due to costs is more immediate, particularly given that ship-owners and all other links in the supply chain are very price-sensitive.

4.2.3 Banking and Accountancy

Trends and Issues

Banking and accountancy services offer separate but complementary services to shipowners. The banks provide the capital for vessel purchases while the accountants provide financial advice on the management of debt, income and expenditure. Both are primarily sub-sectors of the broader financial and business services sector in London.

Many banks and accountancy services rely on the presence of ship-owners for business and those interviewed were concerned about the potential threat of an exodus of non-domiciled resident ship-owners should their tax status change adversely. There is also concern about the manner of regulation and the implementation of European Commission directives, which are felt to be put into effect earlier and more rigorously in the UK than elsewhere in Europe. The principle of regulation was not questioned, but the differences in application gave an unfair advantage in those countries where it was more lightly applied. Similarly, the sector is affected by tax competition between European states, the principal example being the Kommanditgesellschaft (KG) Funds used in Germany to provide mezzanine finance for vessels, which has attractive tax advantages and has provided considerable business for German banks.

The shipping banking sector in London is only a small component of the overall banking activities in the city and is estimated to employ about 400 people. Nonetheless it is responsible for a loan book of the order of £15-20bn. In addition to

the resident banks, which provide shipping finance, some overseas banks also have offices in London due to the presence of the ship-owners.

SWOT Analysis

The strengths of London for banking and accountancy services include the presence of ship-owners, maritime lawyers, shipbrokers and insurance services and also the fact that they are part of the larger financial services sector in London. According to one senior banker, **"London opens more doors to investment banks, brokers and all other services"**. The time zone, language and communications are also considered to be strengths. With regard to the sector itself, there is a sufficient pool of experience and expertise to provide a high level of service to shipowners.

The principal weakness of London is costs, particularly salaries to attract and retain the required skills, although it had to be compared with New York, which was also a high cost centre. Another *perceived* weakness of London was relatively robust enforcement of financial regulation by the FSA in comparison with other European shipping finance centres.

The opportunities in London are related to the size of the ship-owning base. If Government tax policies, over and above tonnage tax, encouraged more ship-owners to locate in London, there would be net benefits to the shipping finance sector.

The most significant internal threat to London's banking and accountancy services is the potential withdrawal of the non-domiciled resident ship-owners if an adverse tax regime is introduced which would result in a significant loss or relocation of their customer base. Other shipping finance centres, including New York, Athens and Hong Kong, pose external threats. In addition Hamburg, due to the use of KG Funds, and Oslo, which has similar ship finance schemes, are also threats.

Conclusions

London is a major ship finance centre, which hosts a strong indigenous banking presence as well as major foreign banks with shipping finance capability in the sector. The main issues concern the regulatory and tax regime in the UK, both of which are considered less advantageous than in competing centres. However, it is the case that

banks are international businesses and should their clients leave London, they would still be retained as customers in the different location.

4.2.4 Technical Consultancy and Surveying

Trends and Issues

Marine consultants and surveyors provide essential services to shipowners and managers, insurers and cargo interests by inspecting and validating the condition of the vessels and cargos themselves. As such they provide the link between the maritime businesses in London and the ships and cargos at sea. They also act for maritime lawyers and arbitrators as expert witnesses in contentious cases as well as offering salvage services in respect of casualties. While the majority of consultants and surveyors are small to medium-sized undertakings, often sole practitioners with niche specialisms, there are a number of firms of sufficient size to offer global reach through branch offices in other maritime and energy centres.

While warranty services (the inspection and validation of vessels and cargos) remain a continuing part of the business, their relative importance has declined as firms have expanded into the offshore and energy sectors and diversified into areas such as naval architecture, environmental services and ships safety management systems. For the larger firms, warranty services might now represent just 20–30% of turnover, and offshore engineering and energy about 70-80%, although a proportion of the latter is also for insurance purposes. Twenty years ago, the reverse was the case. These firms have seen significant growth over this period and in many respects are now more aligned with the offshore and energy sector than with the more traditional maritime businesses of London. This is evidenced by the location of their overseas offices, where Houston and Stavanger often feature.

SWOT Analysis

The strengths that these firms derive from a London location is principally their proximity to insurers and maritime lawyers, although ease of access to and by shipowners and cargo interests is also considered an advantage. A further strength of London is its communications links, especially as much of the work is undertaken overseas.

In terms of weaknesses, sector respondents identified high costs and the poor quality of transport infrastructure. Cost issues are particularly significant, as there is a high level of price competition in traditional warranty work - a market that is in any event mature. Costs also make London an unattractive place for recruiting ex-seafarers, who are essential to the business.

Opportunities for marine consultants and surveyors lie outside their traditional activities of vessel and cargo surveys but have a strong link to the shipping sector. These opportunities are in areas such as safety and quality systems, which are driven by new regulations as they are introduced, as well as a continued expansion of technical services to ship-owners and the offshore industry.

The market is highly competitive within London, resulting in generally poor profitability, particularly in the mature sectors of marine consultancy and surveying businesses. External competitive threats are seen in the energy sector, where Houston and Stavanger are seen as competing centres. Currency fluctuations are an inherent problem, principally in respect of the US dollar which predominates in the energy sector. The larger firms can ameliorate this problem by having US subsidiaries.

Conclusions

Marine consultants and surveyors, particularly as represented by the larger firms, have seen a major growth in the last 20 to 30 years, mainly driven by their diversification into offshore engineering and energy but also due to increasing safety and construction standards applying to shipping. The sector has proved successful and continues to have opportunities for further growth, but not in its traditional activities, which are seen as mature and are also particularly price sensitive. The costs associated with a London location are a significant issue. One firm estimates that being in London reduces margins by 10%: if the upward trend continues, it may precipitate a relocation of firms to lower cost locations.

4.3 Maritime Governance and Regulation

4.3.1 Trends and Issues

Maritime governance and regulation fall into two main categories:

- Statutory regulation resulting from domestic law or the implementation of International Maritime Organisation (IMO) Conventions
- Self-regulation, examples being Lloyd's and the Baltic Exchange

Statutory regulation itself falls into two main categories, maritime regulation which is enforced by the Department for Transport through the Maritime Safety Agency, and financial regulation which is enforced by the FSA. The FSA affects the banking and insurance sectors as well as the market in maritime derivatives, such as Forward Freight Agreements. The European Commission (EC) provides additional statutory regulation in certain sectors under EU competition law. This has granted special status to the P&I Clubs to allow them to operate as cartels providing their own risk cover. The EC however has not been so generous to the Liner Conferences, which are now prohibited from agreeing specific rates although they can continue to agree general tariffs for liner routes. A further area of regulation comes from US extraterritorial legislation, such as the Maritime Transportation Security Act 2002 and the Container Security Initiative.

The FSA is increasing its presence in regulation of maritime bodies and affairs, and the costs of this impact on the rate of return or has to be passed on in terms of increased prices. Regulation by the FSA is broadly welcomed although it is not without criticism, especially from sectors that are new to financial regulation. This criticism focuses on the perceived over-implementation of the provisions of the EC Directives which underpin the FSA's activities and it has been said by a representative of the ship-broking community that "**Regulators in the UK are decidedly more enthusiastic than elsewhere, including Europe**".

This view is supported by a manager of a P&I Club who said that he "did not mind the FSA and approved of regulation, but the robustness of the FSA was a potential problem".

Classification societies can be regarded as industry self-regulating bodies in that they set standards and certify conformity with those standards although they do not have sanctions on those who do not meet those standards (apart from withholding certification). It can also be argued that classification societies also act as intermediate service providers in that certification is essential for insurance cover and for a ship to operate without falling foul of statutory safety and compliance inspections at ports. The trend is therefore for the London maritime services to be increasingly regulated in its financial dealings as well as its performance standards.

The IMO requires separate comment. As it is a UN body it brings representation from its 164 member states to London and also grants consultative status to nongovernmental organisations including a significant number of maritime industry trade associations. This contributes to significant maritime activity in London, although IMO considers itself separate from the London maritime services cluster.

4.3.2 SWOT Analysis

The strength of regulation for London's maritime services is that it allows companies to have confidence in doing business in London, which gives it a competitive advantage in terms of quality of service over centres which are not so closely regulated.

In terms of weaknesses, interviewees identified the costs of regulation and the way in which statutory regulation is enforced, with charges of over-enthusiastic enforcement to the detriment of business efficiency. A further weakness is the perceived lack of UK Government support for London's maritime sector. An example frequently given was the location of the European Maritime Safety Agency in Lisbon rather than London, which would have been the more natural choice, given that there are a large number of organisations, including the IMO, dealing with safety at sea already established in London.

The opportunities provided by the regulatory environment and institutions in London mainly benefit the professional services (lawyers and accountants) and consultancies in developing, interpreting and implementing regulations.

The threats posed by regulation are that its costs and enforcement outweigh the benefits, but the normal process of checks and balances is expected to minimise this. Competitive threats are also posed by other countries wishing to host the IMO, although high switching costs would hopefully make this unlikely.

4.3.3 Conclusions

Regulation is now a major feature within maritime business in London and is set to increase over time as security and money-laundering regulations also take effect. The presence of the IMO is the most significant part of the group of regulatory institutions located in London and serves as a focus for a great deal of related activities undertaken by Admiralty solicitors, accountants, consultants and trade associations. Taken together, with bodies like the International Association of Classification Societies and the International Association of Institutes of Navigation among the 35 Non-Governental Organisations located in London having Consultative Status with the IMO, it can be considered a regulatory cluster in its own right.

4.4 Support Services

4.4.1 Trends and Issues

The support services to the maritime services cluster cover a broad spectrum of activities, principal among which are the supply of staff, the provision and analysis of information, communications and education.

The supply of staff falls into two categories: manning agencies that provide ships' crews to shipping companies and recruitment agencies that supply specialist staff to firms active within the cluster.

Manning agencies are in the main located close to but outside London as proximity to the cluster is not essential, while almost all recruitment agencies maintain a presence within London, both to be close to their clients and accessible to candidates. Due to the requirement for sector knowledge they tend to be specialist firms, the largest of which is Spinnaker Consulting, which is based in Essex but which serves the London cluster. The provision and analysis of information is one of the key features of the maritime industries and a particular feature of the London maritime cluster. The sector consists of the research departments of the larger ship-broking firms, publishing firms providing journals, reports and papers in both traditional and web-based forms, conference organisers and consultants.

The major firms which dominate the publishing sector are the Informa Group, publishers of *Lloyd's List*, Lloyd's Register/Fairplay and Seatrade Communications. All enjoy a high reputation internationally. With the advent of web publishing, however, there have been a number of new entrants to the field in recent years and the sector is now consolidating. Conference organisation is a natural extension of publishing, but is inhibited by the high cost of London as an international venue and a lack of *suitable* facilities for major maritime conferences in the centre of the city.

Consultancy services are generally provided by small, specialist firms, who service particular niche areas although there are larger ones in the field, most notably Drewry and Ocean Shipping Consultants. The consultancy sector lacks cohesion and has yet either to consolidate or promote itself through a lead organisation. It does however contain a depth and breadth of experience that is of international standard. Taken together, these information providers and analysts constitute a significant supporting role for the wider cluster.

The communications sector is dominated by Inmarsat in terms of revenue, which is close in size to the ship-broking sector. However Inmarsat is a wholesaler relying on resellers of which only a few are located in London.

The sector also includes a number of specialist firms providing communications solutions to shipping, chartering and ship-broking companies as well as other software for the maritime services sector. The software providers are relatively new participants in the cluster and have yet to achieve a mature and separate identity, unlike the providers of communications equipment who have their own trade association, the International Radio Maritime Committee, which is based in London.

Maritime education and training is particularly strong in London and is growing. London Metropolitan University and City University both have well established graduate and postgraduate programmes in Shipping and International Trade, which have international status, and City University has recently introduced a further Masters degree in Maritime Operations and Management. Greenwich University also offers a Maritime Management MBA. These courses attract a large number of overseas students.

The London Shipping Law Centre is an industry forum, based at University College London, for continued education, exchange of ideas, research in shipping law, and the development of professional links. The Centre is a key resource for education in maritime law. The professional associations, principally the Institute of Chartered Shipbrokers and the Nautical Institute, through the Marine Society, are also major providers of vocational education courses. In addition, London hosts two learned societies, the Royal Institute of Navigation and the Institute of Marine Engineering, Science and Technology.

These institutions work closely with the cluster providing academic research as well as education services. London has considerable depth in maritime education supporting maritime businesses but notably lacks nautical training to produce qualified seafarers.

4.4.2 SWOT Analysis

Given the breadth of activities of the support services, there is a variety of factors affecting the competitiveness of the sector.

The principal strength for London is that is an information crossroads and thus has a ready supply of market information: according to a leading shipbroker, **"London is a centre of excellence for market information"**. Due to its size there is competition among information providers that ensures a range and volume of information supply to maritime businesses. Bloomberg is planning to offer maritime-related data in the near future.

The continually expanding requirement of maritime businesses for information and its analysis provides scope for further specialist publications and opportunities for the publishing sector, although traditional forms of publishing are under threat from internet-based providers. A weakness is that there is no oversight of the provision and analysis of information, and precision and accuracy can suffer due to competition between the various providers.

The close proximity and relations between educational institutions and maritime businesses is a strength of London. London provides a ready supply of skills for the information and analysis sector and also has a strong ICT sector. The main problem for maritime education in London is the cost. It is an expensive place to study. Although the Cass Business School has recently been able to build new facilities close to the Barbican, London Metropolitan University has focussed its expansion plans in North London (principally Holloway) due to the high cost of premises in the City.

It has been argued that London lacks an independent learned institution for shipping business and maritime economics of an equivalent standing to the Royal Institute of Navigation or the Institute of Maritime Engineering, Science and Technology, already in London, which could set standards for this sector.

Threats to the support services sector mainly come from new entrants and imitators in other centres. In publishing, the advent of internet technology has considerably lowered the barriers to entry and in consequence the established companies now have major competition from electronic news services that can locate anywhere. In education, similar courses to those run in London are now found in the US and Greece. In other respects, the growth of other maritime centres poses a general threat to London's support services.

4.4.3 Conclusions

The support services to the maritime services cluster are robust and capable of expansion, but are generally limited by the costs associated with a London location. This has led to a number locating outside London, particularly manning agencies but also recruitment agencies and research consultancies. Competition in the education sector, in the form of replicated courses elsewhere, can be seen as recognition of the

quality that is offered in London. There is no shortage of applicants and London is seen as being the core of maritime education.

4.5 Industry Associations

4.5.1 Trends and Issues

There are a large number of maritime industry associations in London, which reflects the diversity of maritime services, and activities in the cluster.

Professional associations include the Institute of Chartered Shipbrokers (ICS), the Nautical Institute and the Chartered Institute of Logistics and Transport. Their prime purposes are the development of professional standards and the representation of their members' interests. In addition they provide an important function in disseminating information to their members and providing platforms for discussion of matters of professional interest and thus supporting internal communications within the cluster. Their other main function is in terms of professional education, which again is a support service for the cluster. The ICS is considering the development of new professional qualifications to support the industry.

There are also many trade associations. Virtually every activity involved in the maritime services cluster has a trade association, and their activities in part mirror those of professional associations in that they agree standards and policies, act as a forum and conduit for issues within the sector they represent, provide information to their members, and represent their members' interests to Government, the IMO and other relevant institutions. They have a further and very important function as mediators between industry sectors by coming to an agreement as to the standard conditions under which business transactions can take place. In this sense they act as support services to the cluster's business processes. A number have chosen to relocate or have principal offices in London due to its status as a maritime centre. Examples include INTERTANKO from Oslo and the International Salvage Union from Rotterdam.

Maritime London is a cluster level organisation set up to promote and represent the maritime services cluster as a whole. It has existed to date with seed corn funding from the Corporation of London, and membership subscription. Its objectives are to maintain and enhance London's position as the world's premier maritime centre, to promote all the maritime interests in London, working as necessary with other bodies and organisations, and to encourage inward location of foreign maritime interests.

4.5.2 SWOT Analysis

The strengths of London as a location for industry associations vary according to the focus of each association. Some represent members who are part of the cluster and so co-locate with them while for others, particularly international associations, communications and access are significant factors. The most frequently cited strength of London is the presence of the IMO. Such is the importance of the IMO that the cluster as a whole was described by one respondent as **"the IMO, the commodity markets and the resultant range of services in between"**.

When asked to assess the weaknesses of London as a location, interviewees cited its costs in terms of both premises and staff and the poor quality of the transport infrastructure.

There is opportunity for more collective action by the industry associations should any common cause be identified, such as the need to promote London as a maritime centre. The view was expressed that there are too many associations and organisations speaking with too many voices, resulting in lack of consistency of message. All have been established to meet perceived needs, and whilst in theory they should work together this is easier said than done.

The threats to industry associations in London are the same as the collective threats to London's maritime cluster and vary according to sector. The least threatened component are the professional associations, which as international bodies might better survive the erosion of London's maritime cluster.

4.5.3 Conclusions

The industry associations in London's maritime cluster are diverse and active. They perform a vital role in setting standards and facilitating the communication of those standards to their members. Those with consultative status at the IMO also participate in developing the regulatory and technical framework for the maritime industry.

Industry associations have an important role in facilitating business relations between industry sectors. They provide an essential support service to the cluster and also serve to represent their constituencies within the cluster to outside institutions. They have the potential to do more collectively if common goals can be identified.

Maritime London is a key organisation in the future implementation of cluster level policy response to the strategic position in which the maritime services cluster finds itself. It will need to be developed appropriately to meet the task ahead.

5 Competing Clusters

Maritime clusters come in a wide variety of forms depending on the mix of maritime activities that make up the cluster and their relative weights within the cluster. The maritime clusters that have been identified as competitors to the London cluster are primarily those that have maritime services as a principal feature of the cluster, or that wish to expand maritime services as a strategic objective. In addition, not all maritime clusters as yet identify themselves as such, even though the language and terminology is spreading quickly. Several have yet to establish cluster level institutions to provide support across the maritime activities that constitute the cluster. The following maritime centres include both those that have cluster level support and those that do not.

5.1 Hamburg

Hamburg has the advantage of being both a major port, handling over 5m TEU (twenty foot equivalent unit) per year, and a major centre for ship-owning. It is also a major centre for shipbuilding and ship repair. It has an established ship finance sector which, together with the shipping sector, has been boosted by the Kommanditgesellschaft Funds, tax-efficient ship financing arrangements which have been credited by analysts as adding 600 ships to the German Register. The port is owned by the city, Hansestadt Hamburg, which has ambitions to develop it into the main transport and logistics centre serving North-western Europe.

Germany is providing cluster support at both Federal and regional level. At Federal level it has appointed a Maritime Coordinator from the Federal Ministry of Economics and Technology to facilitate cooperation between and within the maritime sectors throughout Germany. At a regional level, Hansestadt Hamburg has commissioned a number of studies relating to the maritime and port sector to define policy and provide a basis for initiatives. The first concrete result was the opening of the Hamburg School of Logistics in the summer of 2003, which is a public-private partnership. Hansestadt Hamburg is taking cluster studies seriously and is applying the technique to a number of other industry sectors in transport and manufacturing.

Hamburg is a thriving port and shipping centre, and its aim is to develop as a logistics centre which, combined with a prominent ship finance sector, will provide the basis for development of further maritime related services. It has the disadvantage, however, of relative remoteness and poor access (e.g. number of flight connections), which restrict its potential to grow beyond a regional presence, however strong that might be.

5.2 Hong Kong

Hong Kong is one of the world's major container ports and its maritime industry is estimated to contribute 2.5% to its GDP. It is also a ship-repair centre, although this sector has suffered as a result of competition from mainland China. Coupled with this it is also a major financial centre. The port development plan envisages a doubling of container traffic to over 40m TEUs by 2020, but the Hong Kong Government also seeks to strengthen Hong Kong as an international maritime centre.

In June 2003 the Government established the Hong Kong Maritime Industry Council (MIC) to promote Hong Kong as an international maritime centre and to develop the maritime industry. The MIC was set up after a study by Hong Kong Polytechnic University (HKPU) and is comprised of representatives of the maritime industry. It advises the Government on measures required to promote the Register of Shipping, ship-owning, ship management and other services, and the development of human resources for the maritime cluster. The MIC has its own website providing information on the cluster, including statistics on its size and range of activities, and undertakes promotion of the cluster. There is no indication of any direct Government funding for particular projects, as the general ethos is for private sector solutions. However, in the education sector a direct result has been the creation of a new post of Professor of Maritime Studies at HKPU in the newly expanded Department of Logistics.

Hong Kong is seen as well placed to develop its maritime services in view of the scale of its port activities and the size of its financial services sector. It also has the advantages of English language and law, although its development as a maritime legal centre is seen as being inhibited by the concern that the Chinese Government might compromise its independence. There has however been no evidence of this to date and should these concerns be allayed, this sector may well grow.

5.3 Monaco

Monaco is included as a major centre for ship-owning, due to its beneficial tax regime and banking secrecy. However, while it will remain significant within the shipping industry, it has not as yet any significant maritime services sector and shipowners there generally source such services from London. This is likely to remain the case given easy communications and for as long as London continues to offer a comprehensive set of services.

5.4 Oslo

Oslo is a major centre for ship-owning and management as well as being the location of a leading ship classification society, Det Norske Veritas, and ship-broking, ship finance and insurance sectors. As such it operates as a complete Maritime Services Cluster, albeit on a relatively small scale, and the weight of ship-owning is a potential precursor to its growth. Within the industry it is seen as a competent provider of maritime services.

Support for Oslo's maritime services arises out of the Norwegian Maritime Cluster Study, which identified nine regional maritime clusters in Norway, each with a different composition and each in consequence being treated as a separate entity. These clusters are supported by the Maritime Forum, which has several hundred members, whose activities are divided on a regional basis. The Forum spearheads several joint projects within the maritime cluster in order to develop new business opportunities. It is also a member of the European Maritime Industries Forum, a body set up to provide a link between the European Commission and maritime industries in the EU and EEA. The Norwegian Maritime Forum works in cooperation with the Norwegian Research Council, which fosters innovation as a means of competitive advantage for Norway, in order attract and coordinate EU research activities in the maritime field for the benefit of Norwegian firms and institutes. While Oslo has many of the constituents required for a maritime services cluster, it lacks the necessary scale to make it a serious competitor and has not the size to support the internal competition that drives quality and efficiency in services.

5.5 Piraeus

Piraeus is regarded as one of the major European competitors to London for maritime services, and it has seen considerable growth in recent years, not least because of radical improvements to its communications infrastructure. It has a major competitive advantage in terms of cost and an established Greek shipping community, which has been increasingly relocating technical and ship management activities there from London. It has a supporting maritime services sector, much of which is supported by banks, shipbrokers and Admiralty solicitors that operate out of London.

It is anticipated that Piraeus will grow for some time yet and pose further competition to London. It is not yet supported by any cluster analysis or initiatives, although the Ministry of Mercantile Marine now refers to the Maritime Cluster of Piraeus, and developments can be expected. Its key limitation is that it has not developed an international base of shipping companies and is primarily a centre for the very large Greek shipping industry. In addition, it has yet to establish a reputation in which the major shipping operators can have full confidence.

5.6 Rotterdam

Rotterdam is Europe's largest port and a major centre for transport, logistics, shipbuilding and ship repair, and coastal engineering. It is also the location of a number of major shipping companies and has a large education infrastructure. However, it does not have a large maritime services sector or a large financial services sector, and these are to be targeted for development.

Rotterdam's development is supported by the Dutch Maritime Network Foundation, which was the first maritime cluster institution to be set up. It was founded in 1997 after a cluster study of the maritime industries and businesses in the Netherlands. It is a generally privately funded body that provides research information and a forum for discussion to the Dutch maritime industry. It has identified and represents eleven

maritime sectors, including maritime services, and for each its activities focus on four themes: Communications (including promotion), Manpower and Education, Export and Innovation. The Dutch Maritime Network also represents the industry to the Dutch Government on matters such as competition policy in order to ensure that the Dutch maritime industries are not at a competitive disadvantage either domestically or internationally.

The Dutch Maritime Network is considered to be the most successful of the initiatives supporting maritime clusters, and its methodology and industry basis have been extensively used in other maritime cluster analyses. Rotterdam's proximity to both London and Brussels makes it potentially attractive to liner shipping companies, as the recent relocation there from London of Mitsui OSK Line demonstrates.

5.7 Shanghai

Shanghai is experiencing spectacular growth as the Chinese economy is undergoing rapid expansion, and its activities in ports and shipping are burgeoning. Shanghai also has a large and rapidly growing financial sector and one of the world's major maritime universities together with large nautical training facilities. Its maritime services sector is growing with it, and it contains a significant number of offices of London firms. Its current and foreseeable competitive advantages are cargo volumes and low costs, and it is unlikely that there will be any impediment to its growth for the foreseeable future.

Shanghai is too early in its growth stage for any cluster analysis to have much value except in the short term, and in any event basic economic factors are driving its growth. However, as it matures it is anticipated to be either the maritime centre for the Far East or sharing that position with Hong Kong or Singapore. At that stage, and recognising that the Chinese Government will wish to be self-sufficient in services, Shanghai will pose a significant threat to London's cluster.

5.8 Singapore

Singapore's maritime cluster is built on a strong basis of port, shipping and shipbuilding and ship-repair activity. As a port it ranks alongside Rotterdam in

handling around 300m tonnes of cargo each year. In addition it is more than an entrepot and transhipment hub as it has a sizable Register of Shipping which, together with the number of shipping companies with regional operations based in Singapore, has attracted a wide range of ancillary services, such as ship management, ships agency, logistics, ship finance, marine insurance and legal/arbitration services.

The Singapore Government's Economic Review Committee, formed in November 2001, proposed a vision to "develop Singapore into a leading global integrated logistics hub, with robust maritime, aviation and land transport capabilities capable of supporting the global economy". To enhance Singapore's competitiveness as a maritime centre, the Singapore Government is helping industry upgrade the skills of their workers and adopt IT and e-commerce technologies. It is also investing heavily in R&D: in August 2003 it set up a S\$100m fund in an effort to boost maritime technology research and development, promoting a maritime technology cluster strategy.

The Maritime and Port Authority of Singapore has established a S\$20m five-year programme to upgrade IT systems among small and medium-sized enterprises and a S\$80m Maritime Cluster Fund (MCF) to help promote and strengthen the maritime cluster in Singapore. S\$50m of the MCF is for maritime manpower development and to help develop local training structure and capabilities, with the remaining S\$30m aimed at helping shipping companies to reduce operating costs in Singapore. The education initiatives include the establishment of four professorships at Singaporean universities in Maritime Law, Shipping Economics, Shipping Management and Maritime Business Economics. The Singapore Government has called this strategy "London Plus".

While Singapore has shown itself to be very serious in the pursuit of a cluster strategy, analysts have commented that it hampers itself by protectionist policies in the legal services sector and that the corporatist approach does little to engender a risk-taking commercial culture.

6 Policy Implications

6.1 Points of Departure

This report has demonstrated the size of the maritime services cluster in London and its attendant economic significance. The interview programme and the responses to the questionnaire have demonstrated the issues facing the cluster, and the reality that London's pre-eminence in maritime services is under threat from overseas competitors and its rising cost base. The research suggests that London is in danger of losing its pre-eminence in 10 to 20 years if nothing is done. It is fortunate that there is still time for policy measures to have an impact. The purpose of this section is to identify what should be done to tackle this situation.

The policy measures proposed have been grouped under three key headings:

- Institutional responses concern, in generic terms, what kind of reaction is needed by stakeholders to reverse the situation
- Strategic measures that can support London's drive to retain its pre-eminence in the medium to long term
- Tactical initiatives which identify specific projects or initiatives that support the strategic aims

6.2 Institutional Response

There must be a step change in the UK government's understanding of and support for the maritime services cluster. Ideally, this should extend to financial support, but as a minimum it should embrace strong moral support.

The cluster covers several local authorities in London, and the London Development Agency is another key local stakeholder. These stakeholders need co-ordinated strategic thinking and actions. In particular, there is a case for the LDA to adopt the maritime services cluster as a target industry, pre-emptive intervention being needed to prevent what may become a damage limitation exercise in the coming years. The Corporation of London has supported the cluster through Maritime London, but there is substantial scope to do more, such as by automatically promoting maritime services at the same time as promoting the financial services sector through the Lord Mayor and the Corporation's general activities.

The public sector likes to help those who help themselves, and the private sector must step forward with renewed vigour. The cluster itself realises that complacency is its greatest weakness. A change in attitude is needed to encourage companies to compete harder and develop a cross-selling culture, where a company or representative association in one sector emphasises the capability in London of companies that are working partners in other sectors. Companies must encourage new talent into the industry.

The public sector and the private sector must develop a partnership philosophy based on the common objective of retaining London's pre-eminence in maritime services. The public sector already benefits significantly from the economic value of the cluster, and this is reason enough for it to be a serious partner in the defence of the cluster. The private sector needs to learn how to work with the public sector (as already happens in other UK regions).

This partnership should manifest itself in the form of the strong institution that is needed to champion the future of the maritime services cluster in London. It is not good enough simply to leave this to the private sector: the cluster institution should be led by the private sector but the public sector must participate as a committed partner. The latter must provide the support needed to lead collective initiatives and seed corn for developments that will not happen without it.

The cluster institution needs a strategy, a business plan and appropriate backing to ensure that it develops the kind of presence that the situation demands. It should have dedicated people who can work with companies to share ideals, to invigorate others, to spread best practice, and to market London's capability as the best in the world for maritime services.

6.3 Strategic Measures

Stakeholders within the London cluster must develop strategies to deal with the reality of the situation. As cost pressures begin to prevail over cluster advantages, the task for policy-makers is to influence where businesses relocate, to prevent critical mass being lost to alternative centres and, wherever possible, to take active participation in the development of these centres.

The maritime sector can learn much from the approach taken by London's financial services sector:

- The Corporation of London undertakes a major programme of engagement with overseas cities that have competing aspirations for financial services. It makes and receives visits to and from these cities, offers technical cooperation, and facilitates an interface between City practitioners and overseas business, academic and government delegations as well as with British commercial staff working in posts around the world. This strategy has the objective of assisting all potential competitors equally, thereby allowing these centres both to benefit from the pool of knowledge built up over centuries of success in London and to learn practical lessons from London's wealth of accumulated experience
- Within the UK, there is at least tacit inter-regional cooperation on a practical policy level. This recognises that lower value activities of the financial services industry are not sustainable in a London location. Such a view therefore sees regional centres such as Birmingham, Manchester, Leeds and Edinburgh as both competing and complementary, and certainly as an alternative to activities going overseas

Firstly, London must develop a wider perception of itself as a national maritime services cluster. Thus, in strategic terms, the development of low-cost satellites to London offers an alternative to losing firms to competing overseas clusters, and helps prevent them from developing critical mass. The major partnership opportunities include maritime commerce in Liverpool, and ship management / technical / operational services in Southampton and Glasgow. This suggests potential for cooperation amongst cluster organisations such as Maritime London, Mersey Maritime, and MarineTech South, plus a representative for Glasgow.

Secondly, London must develop a strategy of participation in all the existing or emerging competing maritime clusters overseas to ensure that it remains relevant and involved. By helping all cities equally, London may avoid any one competitor reaching dominance where it might challenge London's pre-eminence.

Related to this, London should continue to actively engage in training and education of foreign students to develop links between them and London. Trained people take their skills back to their own countries, but many then tend to look to London as the place they turn to in business when they need services beyond their local capabilities.

It is instructive that the two highest ranked measures that respondents perceive can help maintain London's pre-eminence concern people:

- Greater attention to competence, skills and knowledge
- Promotion of maritime careers to attract young people

This is perhaps encapsulated by the following comment by a senior executive in a shipping company:

"I consider staffing reserves and recruitment as a major issue for London in the future. It is hard to be scientific in this but I am sure that 20/30 years ago very few would have doubted that one benefit of London as a maritime institution was that knowledge and staff were available and that the sum of years gave an extra competence. I think that that is no longer a plus point - maybe not yet a minus, but no longer a distinct advantage as it used to be."

Looking elsewhere, education is a major cluster activity, for example in Singapore (where provision is being coordinated under a one-stop shop concept), and in Rotterdam (where an education co-ordinator has been appointed). London benefits from three of its universities providing maritime courses plus qualifications run by various professional bodies. Given the size of the cluster, however, it obviously needs to cast its net wider to obtain young, bright, qualified people.

Mersey Maritime has aspirations to develop an Institute as a national (and international) vanguard in maritime education. London must feed its needs into this project and other educational establishments in Southampton and elsewhere. The Sea Vision initiative offers a national context for development of education and careers in the maritime sector, with a particular emphasis on the need to provide feedstock with seagoing experience. Maritime London is already developing links with Sea Vision.

The issue of attracting young people into the maritime industry is common to all parts of the UK. The South West has started to tackle this problem by developing a Schools Marine Challenge, and the concept is being developed into a wider initiative in the North West as the Maritime NW Schools Challenge. London should also develop a schools challenge based around its maritime services cluster: e.g. a shipping trading game in the style of share trading competitions.

6.4 Tactical Initiatives

A **communications plan** is needed at all levels – internal, external, and with businesses, government and schools. London deserves to have a vanguard maritime identity as *the* maritime services city. As one respondent put it:

"We need to make shipping fashionable again. We also need to make people realise that banking, legal and insurance industries here (in London) were built on the backs of our maritime past."

London needs an iconic centre that personifies the strength and world leading brand of the cluster in the form of a showpiece "**Maritime Centre/Village**". This can become a symbol of partnership and a proactive approach to competing concepts such as Dubai Maritime City, and also provide cost-effective accommodation for the co-location of relatively small companies and organisations to maximise cluster advantages. This would have a major impact on the cluster.

One of the defining characteristics of many maritime clusters is that some kind of **intranet/extranet** helps bind it together and maximise efficiency. These are mostly based around freight and logistics (e.g. PSA, DPA etc). Feedback indicates that an

intranet linking the various parts of the cluster could be a useful tool, as would a London extranet forum to see which lawyers, bankers, brokers etc are most active.

A cluster level approach to this would bring together various sectors in the cluster. For example, one could link data on vessels with data on markets, offering legal records for vessels and owners, safety records, trading records etc. This might then be integrated with insurance and finance issues - e.g. improved assessment of risk/FFAs etc. It could also be linked into media and reporting. This would be an innovative and blue sky project, relatively high risk but high reward. Competitors are doing this. Singapore and Dubai are applying their considerable expertise in community extranet/intranet systems, and are integrating existing and developing new web based systems to support the establishment of a broad range of maritime businesses.

London must pursue innovation. Although innovation is a somewhat abstract concept, many cluster organisations focus on it, notably the Dutch Maritime Network. There are two examples of how London can be innovative. The intranet / extranet project described above is one. A second would be for the maritime sector to develop a greater presence in London's world leading financial markets, working to develop innovative financing and trading products applicable to the industry. The cluster members need to generate their own ideas that will help the cluster to retain its advantage in competency and knowledge.

London should concentrate on support for and the development of **leader firms** which spur innovation and expansion, and bring along other aspirant leader firms and smaller firms in their supply chain. Such firms are international leaders in their field, but they must have a strong affiliation to London, hence multi-nationals often do not make good leader firm targets for cluster development. London should pursue key **tactical targets:** engagement with the IMO and meeting its needs; retaining P&O Nedlloyd's commercial management in London; and attracting greater participation of BIMCO and the European Maritime Safety Agency in London. Last but not least, London must develop a comprehensive set of **public sector policy proposals** and financial initiatives to ensure that it is put on the same footing as its competitors. This would include, for example, tax incentives for ship purchase such as exist in Germany and Norway; support for the cluster partnership as exists in Singapore and elsewhere; and finally ending speculation on tax changes affecting foreign ship-owners.

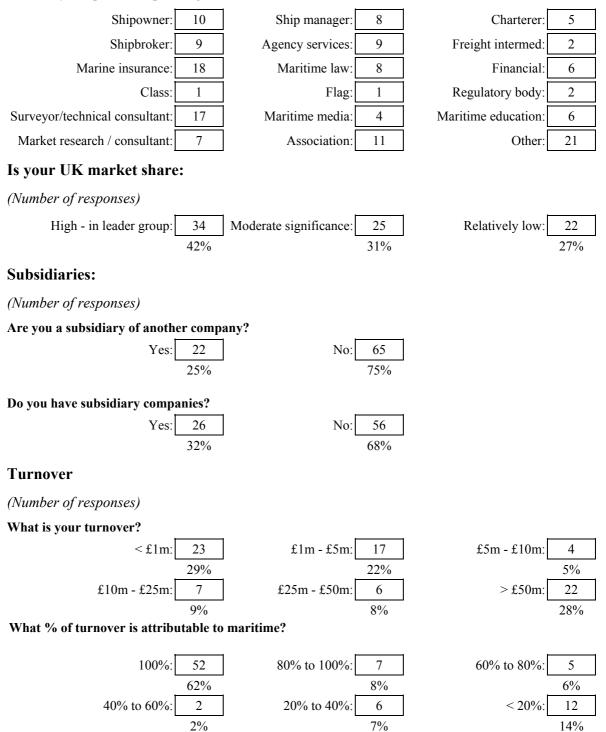
Appendix A – Survey Response

Background information on the respondents

99 companies responded to the questionnaire.

Key relevant business activities

(Number of companies who indicated that they work in each sector – this exceeds total number of companies responding as some work in more than one sector)



What % of maritime turnover is attributable to London?

100%: 16	80% to 100%: 9	60% to 80%: 14
20%	11%	17%
40% to 60%: 6	20% to 40%: 13	< 20%: 23
7%	16%	28%

Employment

Total employment of those responding to questionnaire

Total employment in London in maritime by those responding to questionnaire:

Full time: 3,285	> 50% of their time:	173	< 50% of their time:	808	
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Main overseas markets

(Rank up to THREE areas by entering a number, where 3 = most important⁹ and 1 = least important)

Area	Mean Value
W Europe	1.80
N America	1.12
Far East	1.00
SE Asia	0.49
E Europe	0.31
Africa	0.23
Indian SC	0.23
Other	0.17
S America	0.04

⁹ In the questionnaire, the most important was represented by 1 and the least important by 3 (or higher in other questions). However, this has been reversed in the analysis to allow 0 to represent 'no response/NA' and hence for the means to be calculated.

How your firm competes in London and the benefits of its London location

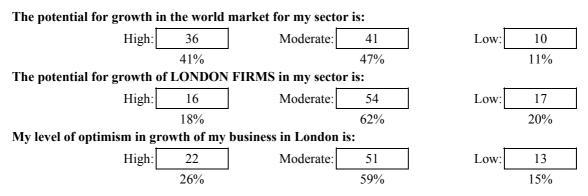
How important are the following strategies to the future of your business?

(5 = very important and 1=not important, NA = not applicable)

Area	Mean Value
Differentiation: Providing leading quality of service or product	4.36
Skills & knowledge: Investing heavily in superior competence	3.87
Niche market: Specialising in one segment	3.08
Alliances: Developing alliances; jointly providing more services	2.79
Innovation: Focussing on development of new services	2.76
Integration: Expanding in-house to provide more services in the chain	2.56
Cost leadership: Being the most competitive on price	2.43
Branding: Investing heavily in promotion and branding	2.33
Overseas expansion: Opening offices in overseas markets	2.08
Takeover/merger: to increase market share / decrease cost base	1.62
Barriers to entry: Using proprietary systems / technology / patents	1.38

Which of the following best summarise your views on the future of business in London?

(Number of responses)



What are the key STRENGTHS your firm derives from its London location?

(5 = very important and 1=not important, NA = not applicable)

Area	Mean Value
Close to market-leading customers	3.59
Availability of market information	3.55
Strong and skilled labour supply	3.40
Close to firms supplying specialist services	3.34
Near to professional bodies	3.24
Knowledge transfer in the wider cluster mix	3.10
Proximity to an exchange or marketplace	3.03
Close to market-leading competitors	2.60
Near to academic institutions	2.18
Proximity of competitors is a motivator	2.16
Access to capital	1.98
Support from central government	1.63
Support from local government	1.38

Which of the following would help overcome WEAKNESSES and improve your firm's competitive position in London?

(5 = very important and	l 1=not important, NA	= not applicable)
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Area	Mean Value
Avoiding complacency	3.27
Development of a larger pool of skills and expertise	2.91
More focus on identifying and nurturing talent	2.80
Making associations and professional bodies more effective	2.78
Greater attention to innovation	2.70
Collaborative working with other companies	2.63
Improving language skills	2.44
Work better with / lobbying the public sector	2.13
Other	0.21

Questions about your business sector in London

What are the key OPPORTUNITIES for your sector in London?

(5 = very important and 1=not important, NA = not applicable)

Area	Mean Value
Doing better at what firms do now	3.30
Utilising technology/e-commerce	3.26
Develop new services	3.22
Develop new geographical markets	3.12
Development of skills & training programmes	2.81
Collaborative working with other firms	2.71
Improve internal structures	2.42
Develop new products	2.33
Strategic reorientation	2.24
Greater public sector support	1.84
Partnership working with the public sector	1.51

What are the key THREATS facing your sector in London?

(5 = very important and 1=not important, NA = not applicable)

Area	Mean Value
Cost of business premises	3.48
Competing centres overseas	3.45
Local transport infrastructure and services	3.11
Cost of employees homes	2.95
Regulatory developments	2.91
National transport infrastructure and services	2.62
International transport links	2.62
Poor sector image - cannot attract young people	2.49
Communications infrastructure	2.46
Educational attainment of young people	2.38
Impact of technology on intermediaries	2.26
Lack of support from central government	1.95
Environmental issues	1.71
Competing centres in the UK	1.68
UK's position outside the Eurozone	1.60
Access to capital	1.60
Lack of support from local government	1.57

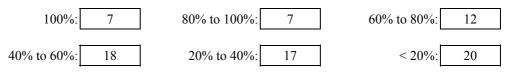
Where are London's MAJOR COMPETITORS for your sector?

Area	Mean Value
US	2.64
Norway	2.64
Hong Kong	2.45
Singapore	2.35
Germany	2.32
Greece	2.15
Netherlands	2.13
Japan	1.98
Other Scandinavia	1.92
China	1.92
France	1.86
Italy	1.44
India	1.37
Dubai	1.23
Ireland	0.86
Other	0.33

(5 = very important and 1=not important, NA = not applicable)

How the Maritime Services Cluster in London functions, and how it competes with rival centres

What proportion of your business transactions are with other London firms?



Which type of firms do you have the most important inter-relationships with?

Shipowner:	62	Ship manager:	18	Charterer:	26
Shipbroker:	19	Agency services:	5	Freight intermed:	5
Marine insurance:	38	Maritime law:	23	Financial:	18
Class:	9	Flag:	5	Regulatory body:	21
Surveyor/technical consultant:	9	Maritime media:	7	Maritime education:	4
Market research / consultant:	5	Association:	12	Other:	16

How important do you think the following factors are in determining the competitiveness of a Maritime Services Cluster?

Area	Mean Value
The presence and depth of intermediary services	3.71
A pool of skilled labour	3.58
Comprehensive availability of services in the supply chain	3.37
A supportive government	3.30
Location of market places	3.23
Physical proximity of shippers and charterers	3.16
Tonnage owned or controlled within the cluster	2.91
The presence of regulatory bodies	2.67
Other	0.03

(5 = very important and 1=not important, NA = not applicable)

How do competing Maritime Services Clusters compare with London against these criteria?

(Rank each competing centre in terms of pre-eminence on a scale of 1 to 9 where 1=worst and 9=best)

Physical proximity of shippers and charterers		Tonnage owned or	
Area	Mean Value		Area
London	3.00		Piraeus
Hong Kong	2.82		Norway
Piraeus	2.66		Hong Kong
Singapore	2.59		London
Norway	2.53		Singapore
Shanghai	2.23		Shanghai
New York	2.22		New York
Dubai	1.07		Frankfurt
Frankfurt	0.97		Dubai

The presence and depth of intermediary services		
Area	Mean Value	
London	3.48	
New York	2.44	
Hong Kong	2.43	
Norway	2.27	
Singapore	2.16	
Piraeus	1.99	
Shanghai	1.19	
Frankfurt	0.82	
Dubai	0.67	

Comprehensive availability of services in the supply chain		
Area	Mean Value	
London	3.34	
Hong Kong	2.31	
Norway	2.22	
New York	2.14	
Singapore	2.08	
Piraeus	1.73	
Shanghai	1.12	
Frankfurt	0.90	
Dubai	0.71	

A pool of skilled labour		
Area	Mean Value	
London	2.75	
Norway	2.33	
Hong Kong	2.00	
Singapore	1.95	
Piraeus	1.77	
New York	1.67	
Frankfurt	0.96	
Shanghai	0.88	
Dubai	0.74	

The location of market places		
Area	Mean Value	
London	2.86	
Hong Kong	1.99	
New York	1.81	
Singapore	1.63	
Norway	1.58	
Piraeus	1.43	
Shanghai	1.13	
Dubai	0.86	
Frankfurt	0.85	

The presence of regulatory bodies		
Area	Mean Value	
London	2.76	
New York	1.84	
Norway	1.76	
Singapore	1.58	
Hong Kong	1.27	
Piraeus	1.09	
Frankfurt	0.89	
Dubai	0.78	
Shanghai	0.55	

A supportive government		
Area	Mean Value	
Singapore	2.44	
Hong Kong	2.00	
Norway	1.96	
Piraeus	1.87	
London	1.34	
Shanghai	1.31	
Dubai	1.29	
New York	1.12	
Frankfurt	0.95	

To what extent do the following CONTRIBUTE to the robustness of the Maritime Services Cluster in London against competition?

Area	Mean Value
The need to build and maintain personal contacts	4.08
The sheer pool of knowledge in London	3.99
The ability to have face to face contact	3.95
Easier to build common values and trust within one community	3.53
The need for informal interaction with clients and collaborators	3.51
Strong pool of skilled transferable labour	3.43
Multi-disciplinary teams can be assembled more easily	3.32
Flexible labour markets	2.92
Favourable UK Government tax measures	2.90
The growth of tonnage owned or controlled from London	2.57
Other	0.07

(5 = very important and 1=not important, NA = not applicable)

To what extent are the following factors likely to be important in ERODING the robustness of the Maritime Services Cluster in London?

(5 = very important and 1=not important, NA = not applicable)

Area	Mean Value
Unfavourable UK Government tax measures	3.43
Strong investment by other governments in competing maritime industries	3.38
Lack of competitiveness in labour costs	3.36
The physical growth centres for trade and shipping are in the Pacific	3.26
The lack of people coming into UK labour pool with seafaring training	3.23
Rising educational standards in India and China	3.10
Insufficient tonnage controlled in London to cement long term future	2.95
Insufficient shipper and charterer presence in London	2.95
The development of infotech and e-commerce	2.92
Rationalisation of number of firms in the maritime industry	2.90
Offices opened overseas will result in knowledge transfer to competitors	2.89
Pressure on continued role of intermediaries	2.76

To what extent are the following POSITIVE factors in recruiting and retaining labour in London compared to other locations?

Area	Mean Value
Potential for professional development	3.56
Higher salaries	3.52
Availability of INFORMAL recruitment channels (clubs, contacts etc)	2.97
Training and skills programmes	2.89
Cultural attractions	2.74
Need to have London on the cv	2.59
Personal taxation in other locations is LESS attractive	2.33
Other	0.04

(5 = very important and l = not important, NA = not applicable)

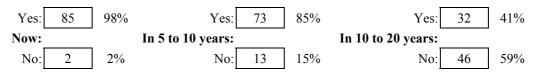
To what extent are the following NEGATIVE factors in recruiting and retaining labour in London compared to other locations?

Area	Mean Value
Cost of housing	3.79
Commuting and transport issues	3.74
Lifestyle in other locations is more attractive	3.10
Personal taxation in other locations is MORE attractive	3.08
Weather / climate	2.90
Other	0.04

(5 = very important and 1 = not important, NA = not applicable)

Questions about how the Maritime Services Cluster in London can become more competitive

Do you believe that London is/will remain the PRE-EMINENT Maritime Services Cluster?



Regardless of how unlikely the prospect is, which competing centre do you think would be most likely to usurp London?

(Please rank each competing centre in terms of its potential to take over from London 1 to 8 where 8=most likely and 1=least likely)

Centre	Mean Value
Singapore	4.49
Shanghai	4.26
Hong Kong	4.21
New York	3.03
Piraeus	3.02
Norway	2.54
Dubai	2.32
Frankfurt	1.85

Which of the following measures are most likely to maintain London as a preeminent Maritime Services Cluster?

(5 = very important and I = not important, NA = not applicable)

Area	Mean Value
Greater attention to competence, skills and knowledge	3.80
Promotion of maritime careers to attract young people	3.63
Businesses in London working together	3.62
More support from central government	3.48
Attracting more tonnage under the control of London	3.29
More focus on innovation and R&D	3.07
Following the "one-shop stop" approach through expansion or alliance	3.01
Rationalisation to larger companies with a lower cost base	2.95
Creation of a national maritime college	2.84
Opening offices overseas	2.76
More support from local government	2.67
Other	0.16

Appendix B – Literature Review

The intention behind the literature survey for this report was primarily to identify and examine the published work on maritime clusters, UK business clusters, and financial and business services and activities in London. The general theories on clusters were dealt with earlier in this report and will therefore only be used as an introduction to the more specific research relating to maritime and related clusters. The categories examined were:

- 1. General cluster theory
- 2. Literature dealing with maritime clusters
- 3. Overseas maritime cluster studies
- 4. Relevant UK cluster studies
- 5. Studies on London's and the UK's maritime industries and services
- 6. Reports on London's financial and business services sectors

When considering cluster analyses the common starting point is the work of Michael Porter, whose book, "The Competitive Advantage of Nations" (London, Macmillan, 1990) has supplied the terminology and concepts behind a large number of subsequent cluster studies. The concept of clusters, while not under that name, can trace its roots to the work of Alfred Marshall (1842 - 1924) who developed the concept of industrial localisation as a stimulus to economic growth. However, it is Porter's definition of clusters, expressed as follows, that is most commonly adopted:

"Geographic concentrations of interconnected companies, specialised suppliers, service providers, firms in related industries, and associated institutions (for example, universities, standards agencies, and trade associations) in particular fields that compete but also co-operate" (Porter (1998), Harvard Business Review, November/December p.197).

With regard to the literature specifically dealing with maritime clusters there are three of particular significance. "Attracting the Winners" (Jakobsen et al, BI Norwegian School of Management, 2002) examines the relative competitiveness of five European maritime nations - Germany, The Netherlands, the UK, Denmark and Norway whose

maritime industries between them account for annual value creation of around \$30bn. The book examines relative national strengths in terms of country attractiveness and company competitiveness using the parameters of cluster dynamics, public policy and company sophistication. The book considers each national cluster as a whole, even though each has significant differences in the weights of the constituent sectors of each cluster, and gives due prominence to maritime services. However, while identifying some of the linkages between these, it frames its conclusions in national terms rather than, say, sector terms and so clouds the larger picture of the interrelatedness of the activities of these clusters. This analysis on the basis of regions follows the initial Norwegian cluster analysis that focused on geographical rather than functional clusters as the prime means of differentiation of activities. It is nonetheless an important contribution to the analysis of the European maritime industries.

"European Maritime Clusters" (Wijnolst et al, Dutch Maritime Network/Agder Maritime Research Foundation, 2003) develops a theoretical framework for maritime clusters based on previous research for the Norwegian and Dutch clusters and an assessment of their performance under cluster lead organisations.

It provides a description of the European Cluster Study (ECS) undertaken for the European Commission in 2001, in particular comparing its theoretical framework to that of the original Dutch study, which divided the cluster into eleven functional sectors whereas the ECS used sixteen sectors. The book does not criticise the ECS, which even its authors consider flawed, except for its focus on purely monetary issues and its failure to address wider economic benefits. The book is useful in using the most established clusters as examples, as they were based on different approaches, the Dutch cluster using industry sectors, the Norwegian cluster using regional centres.

It provides useful research on maritime cluster indicators, identifying the relationship between cluster strength and the type and number of constituent sectors, ranking the important economic indicators for cluster performance, and assessing critical mass and the role of public policy to prevent distortions in competition. It also defines seven enablers for the development of an effective maritime cluster strategy, starting with identification and the establishment of visibility, and the action and support required to maintain and develop the cluster. The book thus provides both an analysis framework and concrete recommendations for a maritime cluster-based policy.

"The Performance of Seaport Clusters" (Peter W. De Langen, Erasmus University Rotterdam, 2003) analyses three seaport clusters. While the book has a narrower field of study, it does have the advantage of going into greater depth in its analysis of maritime cluster dynamics and their drivers. In addition to identifying further factors which support the effective working of the clusters studied, it also quantifies them to give relative weighs to their importance. It is considered that this work can be equally applied to broader maritime clusters.

These three books address maritime industries at country, cluster and sector levels respectively, and each provides a more detailed analysis as their subject matter narrows. Taken together they provide a comprehensive analysis of the current knowledge of maritime clusters.

Individual maritime cluster studies have been conducted for the Dutch, Norwegian, Swedish, German and Italian maritime industries, with the Dutch and Norwegian studies having an extensive secondary literature, as outlined above. The latest country study is "The Finnish Maritime Cluster" (Viitanen et al, Tekes Technology Review 145/2003) which in addition to analysing the Finnish cluster also reviews all other European studies to date, paying particular attention to the shortcomings of the Swedish studies. While it provides a comprehensive description and quantification of the Finnish maritime industry and its financial and employment contribution to that country, it falls short in making any recommendations as to how cluster dynamics, apart from noting what is there, can be enhanced. Its major contribution is, therefore, as a critique of other work done on national clusters.

More general publications on industrial clusters have also been examined, a particular example being "Business Clusters in the UK – A First Assessment" (DTI/Trend Business Research 2001) which forms the basis of the Department of Trade and Industry's approach to UK clusters. It is significant in that apart from some references to "marine technology" clusters in the South East and some other coastal regions, there is no mention of any shipping- or port-related businesses let alone

maritime services, even though clusters of much smaller financial size have considerable prominence. The regional analysis of London's clusters makes no mention of any of the maritime businesses located there, evidence of the sector's lack of visibility.

One possible reason for the DTI's lack of perception could lie in the way economic activities are classified by the Government. "The UK Standard Industrial Classification of Industrial Activities 2003" (Office of National Statistics), in which maritime services are simply considered "Activities of other transport agencies" (63.40), is the basis for information collection for policy purposes, and in this case is certainly a blunt instrument.

A more useful cluster study, which incidentally uses the Trend Business Research/DTI study for support, is "The South East Marine Business and Cluster Research" study (South East England Development Agency, 2003) which was based as far as possible on the sixteen maritime industry sectors defined by the Sea Vision initiative. It was found that it was not possible to undertake the desired depth of quantitative research due to the shortcomings of the SIC codes but this was overcome by the development of a marine sector company database and the formation of focus groups. This research thus provides useful methods for assessing clusters and their dynamics in the absence national statistical information.

A number of non-cluster studies on the maritime services and maritime industries have also been reviewed, an important example being "Maritime Services" (IFSL City Business Series 2003) which provides a comprehensive quantitative analysis of the global shipping industry in terms of vessels, types of cargo, tonnages, their international distribution and related regional trends. This provides the statistical evidence for the growth in importance of the Far Eastern economies and their effect on world trade patterns. It also provides a quantitative analysis of the main maritime services operating in London, which include time series and trends over the last 10-20 years, according to sector and with a particular focus on shipping finance, marine insurance and legal services.

Finally, it provides a financial analysis of the contribution of London's maritime services to the UK economy together with a measure of the numbers employed in the sector, although with the caveat that there are only limited data available on the key financial and economic indicators, further evidence of the problems caused by the absence of national statistical information. It follows previous studies in this respect such as "The Competitive Advantage of the Shipping Industry in the City of London" (London Business School 1994) and IFSL's 1996 and 2000 City Business Series studies on Maritime Services. The quantitative nature of this report is particularly useful as provides evidence of the disproportionate relationship between UK shipping activity, in terms of the UK-owned fleet and the size of the UK registry, and the scale of the maritime services cluster in London.

Other economic analyses include "Global Ocean Markets" and "UK Marine Industries – World Export Market Potential" both by Douglas-Westwood Associates (Institute of Marine Engineers, 2000) which analyse the size of the overall maritime market and the UK's opportunities within it. Essential elements of a maritime cluster are the presence of shipowners and maritime skills. The current concern about the tax status of non-domiciled resident shipowners has been well documented, particularly by Cliff Pratten in his paper for the Baltic Exchange "The Economic Contribution of the Foreign Shipping Community to the UK Economy and the Economic Effects of a Change to the Taxation of the Foreign Shipping Community" (2002). The alternative view can be found in the background paper by the Treasury and Inland Revenue; "Reviewing the residency and domicile rules as they affect the taxation of individuals" (April 2002).

The issue of maritime skills in the form of the estimated demand and supply of exseafarers for shore based employment has also been the subject of a recent study by Cardiff University, "The UK economy's requirements for people with experience of working at sea 2003" commissioned by the Department of Transport, the Marine Society and the Chamber of Shipping. This records the changing priorities of employers regarding the essential or only advantageous requirement for marine qualifications for shore-based, maritime-related employment and the substitution, in certain cases, of alternative forms of qualification. The report also put the overall numbers employed in the UK's maritime sector at 131,684, which differs considerably from the Sea Vision research that put the figure at 254,238 in 2002. This is further evidence of the need for sound statistical information from official sources.

A number of reports on London's financial and business services sectors have been published by the Corporation of London in recent years, three of which are of significance to this research. Of these, the principal cluster study is "Financial Services Clustering and its significance for London" (February 2003). This examines twelve service sectors in terms of their geographical spread and clustering, interrelations between some of the sectors and the internal dynamics of the cluster. It provides useful findings as to the strengths of the cluster provided by proximity and personal communications, factors that lend to de-clustering, particularly the costs of premises and staff, and other weaknesses of London as a location, principally the poor condition of public transport.

While the report concentrates on banking and related financial services, it also includes a range of business services including property development, architecture, recruitment and IT and concludes that the banking sector, in particular investment banking, is the hub of these services. This conclusion is open to examination given the other economic activities in London, including a large public sector and a still significant industrial sector, that draw upon these business services. The report includes rankings for the importance of the inter-relationships between the sectors, with maritime services placed sixth in order of precedence, equal to the accounting and IT-related sectors.

Two further reports are concerned with London's international competitiveness as a financial services centre. The most recent is the CSFI report "Sizing up the City – London's Ranking as a Financial Centre" (June 2003), which provides comparison with New York, Paris and Frankfurt. This report supports the findings of the financial services cluster study, particularly in respect of the threats posed by high domestic and commercial property costs, salary costs and the poor state of public services and infrastructure, especially transport. It also, like the financial services cluster study, puts the level of regulation, particularly by the FSA, into context in that it is generally rated well despite the level of complaint about heavy handedness. Most usefully, it makes the point that in size and scope London is in the same league as New York

even though the US economy is seven times the size of that of the UK, which parallels the IFSL findings that London's maritime services are considerably larger than would be expected from the size of its domestic industrial base. In both respects London can be said to punch above its weight.

The other report, "Competitiveness of London's Financial and Business Services Sector" (September 1999) also compares London to New York, Paris and Frankfurt as well as Tokyo, and supports the general findings of the other two reports examined with regard to London being a high cost centre, although it adds in mitigation that London's high productivity reduces unit costs to a competitive level. The particular value of this report is that, unlike the other two, it identifies the sub-sectors of the banking sector for analysis and comparison with those in the comparator centres, thus avoiding the weakness of treating baking as a single activity. Unfortunately, it does not include shipbroking, which it considers to be less quantifiable and not able to permit detailed analysis.

These three reports serve to underline the common themes of London studies, particularly in respect of the global competitiveness of its trading sectors and the size and weight of its support services together with the weaknesses of London in respect of costs and the poor quality of infrastructure and public services.

One final Corporation of London publication deserves a mention in order to place all of these studies into a historical context. "No Mean City – A Guide to the Economic City of London" was published in 1967 and, of the fourteen sectors examined, four were concerned with London's maritime services, a prominence that has been overlooked in recent years rather than lost. It is time to reinstate this prominence.

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The Corporation of London

The City of London is exceptional in many ways, not least in that it has a dedicated local authority committed to enhancing its status on the world stage. The smooth running of the City's business relies on the web of high quality services that the Corporation of London provides.

Older than Parliament itself, the Corporation has centuries of proven success in protecting the City's interests, whether it be policing and cleaning its streets or in identifying international opportunities for economic growth. It is also able to promote the City in a unique and powerful way through the Lord Mayor of London, a respected ambassador for financial services who takes the City's credentials to a remarkably wide and influential audience.

Alongside its promotion of the business community, the Corporation has a host of responsibilities which extend far beyond the City boundaries. It runs the internationally renowned Barbican Arts Centre; it is the port health authority for the whole of the Thames estuary; it manages a portfolio of property throughout the capital, and it owns and protects 10,000 acres of open space in and around it.

The Corporation, however, never loses sight of its primary role – the sustained and expert promotion of the 'City', a byword for strength and stability, innovation and flexibility – and it seeks to perpetuate the City's position as a global business leader into the new century.

