

# UK Port Supply Chain

## Excellence Document



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## Foreword

**90% of the world's trade is moved by sea and ports and terminals the world over provide the gateways in each country for this trade. Efficient and increasingly smart ports are needed to facilitate this global trade acting as a crucial connection between sea and land transport. Each year we see higher throughput of goods and passengers, demanding more from the infrastructure, and associated services.**

Ports constitute an important economic activity in coastal areas and are important for the support of economic activities into hinterland areas. As drivers of local and global growth, ports represent a hugely significant opportunity, and whether it is developing new or upgrading existing infrastructure and systems, there is a need for efficiency and excellence at the core of how all ports operate.

To ensure that ports are well-planned, built and shaped for the future, port owners and operators turn to experts which can support their activities and goals. With challenges to consider ranging from geography, hydrography, economics and even politics, it is no easy undertaking to design, build and operate a port without collaboration with experts.

The United Kingdom (UK) has many world-leading companies who provide the services and expertise which helps drive the industry forward, from design and planning, infrastructure development, facilities, equipment, operations and management. Even through to additional vital areas such as safety, security, data and analysis, and the means of making ports smart into the future.

This document provides a snapshot of the services and links to the companies which are working globally to support ports, to help businesses to grow, and to keep trade flowing.



**Tom Chant**

**Chief Executive  
Officer**  
*Society of  
Maritime Industries*

Representing the ports & terminals engineering industries in the UK.



## Foreword

**British ports are the heartbeat of the coastal regions, directly employing over 115,000 people and handling 95% of the UK's international trade, as well as many other economic activities such as providing hubs for our energy, tourism and fishing industries. With our geography and maritime heritage, Britain is a trading nation and our ports are quite literally the nation's gateways to the world. We have 125 cargo handling ports across the UK connecting us to all corners of the globe and the industry is strategically and financially independent of Government.**

The sector has invested in modern infrastructure in all parts of the UK and collectively it handles almost 500m tonnes of freight each year, worth more than half a trillion pounds. This includes a wide range of liquid and dry bulk materials for use in energy generation and manufacturing, half the food the UK consumes, as well as millions of containers and 'roll-on roll-off' freight units carrying a wide variety of goods. These UK imports and exports enable British manufacturers and exporters to operate in global markets and support millions of jobs.



**Richard Ballantyne**  
*Chief Executive  
Officer*  
British Ports Association

Representing ports that facilitate 86% of the UK's maritime trade as well as many more.



# Introduction



## Department for International Trade

The UK ports industry is a global leader. From the development of ideas and models through to planning, management, financial services, information systems and management, education, training, equipment, design and maritime security; UK companies are now exporting specific skills in all of the component areas of the sector to all corners of the world.

UK companies have substantial expertise in all areas of port development and operation and are helping overseas government, ports and port developers to deliver the right port for their country and their customers. These skills are deployed overseas, assisting other countries in private sector port management.

With a proven history in delivering world-scale port projects, UK planning and design firms and niche maritime consultants are among the best in the world in drawing all of these different strands together.

The UK has a pioneering role to play to ensure that the main arteries of world trade are secure and safe for all. While the UK's training industry is synonymous with quality and excellence blending innovation with tradition seamlessly. Ensuring the ports sector operates to the highest standards.

From operators to equipment suppliers, security companies to engineering consultants and from lawyers to bankers, the UK represents the ideas and vision, the engineering ingenuity and the fiscal and management skills that can develop and deliver port projects across the world.

The UK is leading the way to develop greener more sustainable ports and is embracing the latest technology to make ports smart, safe, secure and efficient.

This document provides information on the capabilities available in the UK, and some of the excellent companies working in many regions globally.

The Department for International Trade (DIT) has developed a 5-year plan promoting the UK's world class global maritime offer.

The plan was developed with industry to promote and access global opportunities for products, services and investments of the UK's maritime sector. It presents collaborative measures and commitments from both DIT and the industry focussed on supporting the UK's maritime exports.

*“Supporting the UK port supply chain sector to win business abroad.”*

***The Department of International Trade***



### The plan aims to:

- support the UK maritime sector to capture significant global market share in important technologies to improve the environmental performance of the global maritime fleet
- help the UK maritime sector become an acknowledged world-leader in the adoption of digital technologies and associated business services, including legal and insurance services for autonomous vessels
- promote the UK's strong capability in maritime science globally
- maintain the UK's number one position for maritime services against increasing global competition

### The plan's focus areas include:

- Autonomous vessels
- Digital shipping
- Green shipping
- Marine science
- Maritime services

These were highlighted in the trade chapter of Maritime2050 and align with the grand challenges sighted in the industrial strategy.

Inside this document, it is possible to see how the UK port supply chain can deliver on the needs of industry, offering the vital tools, capability, skills and understanding to translate challenges into results.

## Cargo and Bulk Handling Equipment

**From the very latest new ports, to those upgrading their capabilities, one of the largest, most significant and important investments any port can make is in cargo handling equipment.**

The exact nature, of course, varies depending upon the type of cargo, but every port needs the right facilities to handle cargo safely and efficiently. Equipment used for loading/ discharging operations are varied and complicated, and whether a port needs cargo cranes, side-loading system with conveyors, side-shifters, elevators, belt conveyors, grabs and bagging systems, pneumatic dischargers, ro-ro cargo handling gear and cargo pumping systems, then these can be provided by United Kingdom (UK) companies.

There is constant development work to deliver the best systems that clients need. Cargo and material handling equipment

manufacturers continue to innovate, particularly with the trend toward zero emissions technologies. Or with the evolution of traditional approaches, tailored to new environments and conditions.

Next-generation technologies can also mean new challenges, and UK companies work to the fore to ensure issues such as infrastructure, competence, and operational planning are in place to best allow ports to take advantage of opportunities.

UK companies offer years of experience and award-winning unrivalled services worldwide. These experts can provide global coverage, dedicated aftersales and a network of technicians to support clients. Their knowledge means that they can provide a host of additional services to boost client businesses, such as management, and development consulting.



*The UK excels at:*

- **Cargo care**
- **Customer service**
- **Future proofing investments**
- **Innovation**
- **Market understanding**
- **Research and development**
- **Sector knowledge**
- **Zero Emission technology**



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### Andron Handling Limited

Andron Handling specialises in high quality lifting, handling and production equipment. From our factory in Marlow, Buckinghamshire we design, manufacture and deliver for a wide range of applications in the United Kingdom and overseas.

We work closely with our customers to provide solutions designed to their individual requirements and back this up with comprehensive on-site support, servicing, spares and training packages.

#### DIT Active Regions

- |   |                 |
|---|-----------------|
| • Africa                                  | • Europe        |
| • Asia-Pacific                            | • Latin America |
| • China                                   | • Middle East   |
| • Eastern Europe and Central Asia Network | • North America |
|   | • South Asia    |



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### BLOK Container Systems

BLOK Container Systems is an inventive engineering business offering new products to enable ship-to-shore cranes move containers faster.

Moving more containers every hour means that vessels can be turned around faster saving time in port, fuel and emissions.

Products include: BLOK Spreaders to move empties two at a time; BLOK Rigs to fit and remove twistlocks 30 per cent faster than manual operations and BLOK Trailers to move two laden or four empties in one go.

For more information about how to make your terminal cranes move containers faster contact: [selwyn.rowley@blokcontainersystems.com](mailto:selwyn.rowley@blokcontainersystems.com)

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### Nectar Group Ltd.

Today, Nectar Group operates and maintains a number of Bulk and Breakbulk Terminals around the globe, directly handling in excess of 10 million tonnes per year as well as continuing to offer a range of value-added bespoke solutions for handling bulk and Breakbulk cargoes. The Group also offers consultancy, sale of equipment and maintenance services. The company has operated in over 75 countries worldwide and employs over 400 personnel.

#### DIT Active Regions

- Africa
- Asia-Pacific
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- Middle East
- North America
- South Asia



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### Telestack

Telestack are one of the key players in the bulk material handling equipment industry and are widely respected for their understanding and experience, particularly within the mobile sector. Mobile equipment has increased in popularity due to the overwhelming trend to increase flexibility, productivity and efficiency as well as maximise on CAPEX investment. With over three decades of experience in the ports industry, Telestack boast one of the most impressive portfolios in the industry spanning a wide range of commodities.

#### DIT Active Regions

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- South Asia

## Coastal Infrastructure and Environment

**The design and ultimately the success of any port or terminal rests on the ways it interacts with the coast, and of how the infrastructure is planned and developed.**

Across a range of providers, maritime and coastal engineering contractors cover a wide range of projects, including the development of ports, harbours, marina design and waterfronts, coastal protection, dolphin structures, embankment and offshore wind foundations, floating infrastructure and the strengthening of anti-flood embankments.

Shaping the coastal environment to best facilitate the needs of ports, while also taking into account the environmental impacts and the needs to be responsible, sustainable and to operate to the highest environmental standards.

Providing the right expertise to maintain a healthy marine environment, while also focusing on commercial needs and

requirements is at the forefront of work in this sector. Indeed, port authorities and operators, developers and investors, financial institutions, local government authorities and public sector clients globally rely on coastal infrastructure and environmental expertise for a whole range of maritime development schemes.

Port and marine projects can be complex and require specific expertise. UK companies provide world-class solutions in these environments, providing innovative solutions that mitigate risk and deliver for clients and for stakeholders. They have the skills and expertise clients need, but so too the resources, tools and data to deliver on the demands of port development, coastal areas and environmental protection.

*The UK excels at:*

- **Civil engineering innovation**
- **Clean growth**
- **Complex project management**
- **Cost effective solutions**
- **Design**
- **Development solutions**
- **Environmental assessment**
- **Green solutions**
- **Structural integrity**
- **Sustainability**



### Aarsleff Ground Engineering Ltd.

Aarsleff Ground Engineering Ltd are equipped to work on several types of site delivering specialist ground engineering solutions to solve technically challenging ground related problems in the UK and abroad. In addition to driven and drilled pile foundations, they design and install specialist retaining walls such as sheet pile, contiguous and secant pile walls, as well as driven and drilled king post walls. Their expertise also comprises nail, anchoring, drilling and grouting work, augured piles and restricted access piling all adapted and value-engineered to the needs of the individual client and sector.

#### DIT Active Regions

- Europe



### BMT

BMT is a leading international design, engineering, science and risk management consultancy with a reputation for engineering excellence. We're driven by a belief that things can always be better, safer, faster and more efficient. From initial concept through to design, construction, operation and eventual decommissioning, we support customers at every stage of a project lifecycle. Our customers across the world buy outcomes: cost-effective solutions to business problems that require technical excellence, independent thinking and innovation.

#### DIT Active Regions

- Africa
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- Australia



### Earth & Marine Environmental Consultants Ltd.

EAME is a multi-disciplinary environmental consultancy practice that specialises in providing technical expertise and innovative solutions to complex and challenging environmental problems. The firm is based in the UK, Iraq, Kurdistan, Romania, and Guyana which allows us to operate globally across a wide range of technical disciplines and industrial sectors.

#### DIT Active Regions

- Eastern Europe and Central Asia Network
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- Latin America
- Middle East



### NIRAS Group UK

NIRAS is a leading, international consultant in port and maritime engineering and planning. Our UK offices have a long track record of marine civil engineering design. Our success is based on comprehensive technical knowledge, extensive industry experience and a strong focus on value engineering and addressing the needs of our clients. Due to our expertise and excellent reputation for cost effective and innovative design many of our clients have been working with us for several decades.

#### DIT Active Regions

- Africa
- Asia-Pacific
- Eastern Europe and Central Asia Network
- Europe
- South Asia





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## WSP

WSP maritime specialists are dedicated to the planning, design, and construction of port facilities, marine infrastructure, and coastal facilities. We deliver innovative, value-engineered outcomes that have benefited from decades of experience, and a thorough understanding of the challenges and risks that confront this multifaceted sector. We are committed to incorporating environmental characterizations and sustainability principles into every phase of our projects.

### DIT Active Regions

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## Zwanny Ltd

Zwanny is a 7 year old family business based in Wales. We stock, supply oil pollution equipment and manufacture custom build spill kits to meet your requirements.

With many years of experience in industry we offer the correct products that will work cleaning up oilspills and if needed can offer training on the products Zwanny supplies.

### DIT Active Regions

- Europe
- Middle East
- Africa

# Cyber Security

**Ports, harbours and terminals are made up of an array of highly advanced equipment. Underpinning this are the systems which make everything work in a smart, harmonised, safe, secure and efficient manner.**

As such the software and protections which allow the hardware, the cranes, gantries, gates and all parts of the operational chain to operate are vital parts of any port.

The modern maritime industry is increasingly data driven, so for any port there is a need to ensure that clients are given the interactions they expect and need. While the infrastructure is controlled by the right software, based on proper data and analysis. This is why the provisions are so important when operating ports today.

Parallel to the positives of software and connected ports comes the need to guard against potential attacks or weaknesses in the system. Cyber-attacks on port systems and shipping are a real and serious threat, and whether it is a virus breaching a system, port assets infected with malware, jamming or interference with wireless networks, or a

host of other threats. Ports must be able to understand the threats, protect from them, and respond effectively.

Companies in the UK are global leaders in the development and provision of software, data and the cyber security solutions which go into modern ports and terminals. This is based on the leadership on cyber protocols and regulation, as well as the leading software and data companies which have grown in the UK.

The UK has made a clear commitment to cyber security and resilience, and this has seen sustained growth in this sector, with many new firms coming to the fore. The majority of firms are active in providing networks security, information risk assessment and management, and cyber professional services. With solutions from boutique firms through to some of the largest, longest standing providers globally, UK cyber security consultants and service providers can provide the right solutions for any port.

### *The UK excels at:*

- **Connectivity**
- **Data management**
- **Digital Storage**
- **Emergency response**
- **Management**
- **Network security**
- **Risk assessments**
- **Support for clients**
- **Threat mitigation**





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### Astaara Company Limited

Astaara provides maritime companies with a comprehensive risk management / risk transfer response to the growing cyber threat they face. As the maritime industry landscape changes, with advances in technology and the use of big data, the risk of cyber attacks increases.

Our flagship offering AstaaraCyber is modernising this area of the insurance industry with a suite of services including, insuring cyber risk, cyber risk management and analytics. We will help the maritime community to navigate the cyber risks, providing the industry with assurance and expertise.

#### DIT Active Regions

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### Atheniem Ltd

Atheniem provide cyber risk and security consultancy to the UK Defence, Security, CNI and Maritime markets. Atheniem also provide training and in the maritime market and have developed a one day Maritime Cyber Risk Management course to address the latest IMO cyber safety aspects of the ISM code. The course is unique as it is recognised by the Merchant Navy Training Board and endorsed by the UK Chamber of Shipping.

#### DIT Active Regions

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### CyberOwl

CyberOwl helps maritime and CNI asset operators gain visibility of their remote systems, actively manage the cyber risks and gain assurance of cyber compliance. We provide a multiple award-winning cybersecurity monitoring and analytics solution, a managed service and specific cybersecurity consulting to support the asset operator.

Medulla, our solution provides visibility of systems of and raises early warning of cyber attacks on operational assets. Medulla is optimised for challenging marine and offshore operating environments.

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### Cyber Prism Limited

Cyber Prism's core capability is our genuine expertise in cyber security for the Operational Technology (OT) that operates a facility and keeps it safe, particularly in the maritime and energy sectors: our Technical Director is one of the very few to hold the CCP qualification CESG(GCHQ) Certified Professional at the highest level, CCP Lead Cyber Security and Information Assurance Auditor. We cover Information Technology (IT) as well, and have a particular interest in the vulnerabilities inherent in IT/OT convergence. Risk analysis, compliance, network monitoring, cyber-attack response and systems restoration are core services.

#### DIT Active Regions

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### ESID Consulting

ESID Consulting is a specialist insider threat management & counter corruption cybersecurity firm. Our approach is bespoke and based upon our partners needs.

A trusted advisor for the long term, we help manage the challenges of compliance, cyber risk and corporate espionage. Protecting reputations and allowing our clients to get on with running their business, knowing we've got them covered.

#### DIT Active Regions

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### HudsonTrident UK

Through planning, training and analysis, HudsonTrident UK has reduced vulnerability and improved security at more than 300 ports around the world. Through our converged security approach, HT UK has been heavily involved in projects to assess and address security, both physical and cyber, at some of the world's major ports and facilities in the US and the Americas, Europe, The Middle East, Africa and Asia.

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### Nettitude

Since its formation in 2003, Nettitude has grown into a global leading enterprise, with its global headquarters in Leamington Spa, Warwickshire. As a multi-million-dollar enterprise, Nettitude currently employs over 180 security professionals. In March 2018, Nettitude was acquired by the Lloyds Register Group, which is amongst the global leaders providing professional engineering and technology services in over 185 locations worldwide. Nettitude's global presence facilitates the provision of cyber security, compliance, managed security services, infrastructure and incident response services to organisations around the world.

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### Templar Executives

Templar Executives is an award winning, international Cyber Security advisory services and solutions company. We have an outstanding track record in helping clients develop a resilient and business enabling Cyber Security capability and embedding best practices for competitive advantage across all industries, including Maritime.

Templar Executives Maritime Cyber Emergency Response Team (MCERT) provides services including Cyber incident reporting, emergency response and threat intelligence. The Templar Cyber Academy for Maritime (T-CAM) delivers certified training courses and e-Learning. Our Maritime Cyber Risk Assessment (MCRA), a tiered set of offerings, ranging from compliance to comprehensive cyber maturity assessments, aligns to the latest IMO guidance and industry best practices.

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# Education and Training

**Whether it is for port workers handling cargo, training maritime executives ashore, or even further and higher education, the UK has long been a world class destination for the provision of training and education.**

Maritime training courses are provided which build to provide port workers and executives with the necessary qualifications, to allow the safe operation, management and maintenance of ports, as per the relevant rules and regulations. There are also revalidations and short courses to maintain skills and to advance specialisations.

UK colleges are known and respected across the industry. In key maritime locations such as Fleetwood, Glasgow, Liverpool, Southampton and South Shields, leading educational establishments have long been training the maritime workforce, whether on ships or in ports.

There are many world leading UK companies in the maritime training space, and these have long been innovators at the forefront of new technology. Computer Based Training

was introduced to the industry and was a huge success. Now, there is also significant investment in areas such as Virtual Reality and performance management.

Career paths and development are vitally important to both maritime professionals and the industry alike, and the UK leads the way in ensuring that qualified and experienced personnel can plot a course through to new opportunities, promotions and roles. The Department for Transport has published a “People Route Map” as part of the Maritime2050 strategy.

Every year thousands of maritime workers, whether in ports, onboard ship or shore-based professionals, turn to UK companies for their training and education. Some use distance learning, or online facilities, while others from all over the world come to study in the UK. Many also return to further studies here too. UK Universities offer a vast array of maritime options at degree and post-graduate levels.

*The UK excels at:*

- **Benchmarking**
- **Career development**
- **Competency development**
- **Course advancement**
- **Enhanced Reality**
- **Gamification**
- **Innovation**
- **Knowledge transfer**
- **Online solutions**
- **Pedagogical approaches**
- **Performance management**
- **Research**
- **Student and client support**



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## Marlins Training Limited

Marlins provides training and assessment solutions to the maritime industry including the cargo, cruise, superyacht and offshore sectors. As the leading provider of Maritime English testing to seafarers worldwide, we have an in-depth understanding of the real crewing and training challenges facing today’s shipping companies across all key crew supply countries.

Our comprehensive catalogue of elearning courses offers engaging, up-to-date training content aimed at enhancing seafarer knowledge and boosting vessel performance. Our in-house industry experts and subject matter specialists are ready to work with you to help deliver a customized training solution that meets your needs.

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## Marine, Offshore and Subsea Technology Group, School of Engineering, Newcastle University

Newcastle University has a proud tradition of providing some of the very best marine technology education and research for over 100 years. We have world class specialist marine technology research facilities both on our vibrant city campus and at our coastal station in Blyth where our dedicated research vessel is also berthed. Our accredited taught programmes attract students (both full-time and part-time many are working in industry) from all continents and span Marine Engineering, Offshore Engineering, Naval Architecture, Pipeline Engineering, Subsea Engineering and Management, and Shipping and Logistics. Our students have excellent employment prospects and our thousands of alumni are working all over the world in areas from renewable energy to consultancy, and many also work for governmental and regulatory agencies.

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- <https://oceantechnologiesgroup.com/>

### Ocean Technologies Group

The Ocean Technologies Group is a global learning and operational technology company dedicated to helping companies to meet the challenges of 21st Century shipping. The group is built on historic and iconic maritime brands Seagull Maritime, and Videotel with over 60 years collective experience of helping the most successful ship operators achieve the highest standards of safety and operational excellence. It is this collective knowledge, experience and ability to collaborate with our partners, that will empower the Ocean Technologies Group to help to make the industry safer, stronger and able to excel.

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### Tapiit Live

Tapiit Live is the world's first live and interactive training platform for the maritime industry. We have the technology to live stream to over 45,000 vessels globally via our service agreement with Inmarsat. Whether its onshore or offshore, we have the solution to provide high quality interactive live training whilst saving up to 80 percent on annual training budgets.

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### University of Southampton (Southampton Marine & Maritime Institute)

The Southampton Marine & Maritime Institute (SMMI) provides an open gateway to the large community of ocean-facing researchers at the University of Southampton tackling major scientific, engineering and societal challenges across the breadth of the marine and maritime domain.

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- [www.plymouth.ac.uk](http://www.plymouth.ac.uk)

### University of Plymouth

With its origins as a School of Navigation dating to back to 1862, the University of Plymouth offers a suite of undergraduate and postgraduate marine and maritime programmes, including maritime business, security, navigation, and marine engineering. With a truly international alumni network, supported by our alumni organisation PYNDA, we offer a distinctive, industry recognised learning experience.

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## Engineering and Port Equipment

**Engineering services are vitally important in ensuring that ports operate safely and efficiently. Often these will include the inspection, testing, design, manufacture and supply of all manner of solutions to satisfy the engineering demands of all different kinds of operations and ports.**

UK port engineering providers offer a vast array of services, which allow ports around the world to operate safely, and to maximise efficiencies. The skills, knowledge and equipment to repair and maintain port assets are a hugely important part of the engineering offer, but there is more too.

Solutions also include those such as inspection work, which may consist of third-party work, lifting operations and lifting equipment surveys, scheduled mandatory checks. There is also a focus on the design of work equipment processes, which ensure regulations are adhered too and people are kept safe.

Testing is another vital part of the engineering service provision, and this may include non-destructive testing (NDT), proof load testing, dye penetrant and ultrasonics. These services allow ports to meet their regulatory requirements, and provide confidence to workers and clients alike.

Engineers also provide design facilities and expertise, and are able to produce the parts and equipment which keep ports working. In addition to the engineering, there are also

many national and international standards covering the design and application of port equipment. It is vital, therefore, that operators adhere to rules and regulations.

Advances in equipment and technology underpin the performance of ports and terminal industries, and operators face a continuous challenge to improve efficiency in their operations. There are many drivers, from increase in vessel size, as well as demands for improved safety and better sustainability in ports and terminals worldwide.

New and emerging technologies, drive ports forward and UK firms provide the means to innovate, with thought leadership, best practice, development and use of equipment at the core. With advances in drives, controls and robotics, process automation, automated identification, sensing and navigation, communications and data management technologies, operations software, systems integration and associated technology, UK companies have the answers needed for ports to improve, or to evolve.

UK companies are involved in the design, manufacture or supply of port equipment and technology and provide clients with the resources to service trade, but also the insight to plan effectively for the future. These companies lead the way in improving safety, efficiency and facilitating the development of greener and smarter ports.

*The UK excels at:*

- **Design and development**
- **Efficiency**
- **Green solutions**
- **Innovation**
- **Investment**

- **Performance assessment**
- **Robotics**
- **Safety**
- **Sustainability**
- **System integration**
- **Technology**



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### **Atkins, a member of the SNC-Lavalin Group**

Atkins is one of the world's leading design and engineering consultancies, with the depth and breadth of technical expertise to respond to the complex challenges. Our expertise, innovation and understanding of the maritime sector helps our clients respond to the technical, economic, regulatory and environmental forces sharing the industry. Through our experienced staff, and with over 50 years of delivering solutions to the maritime sector, Atkins offers maritime expertise with breadth and depth of experience to support any size of project.

#### **DIT Active Regions**

- Africa
- Asia-Pacific
- China
- Eastern Europe and Central Asia Network
- Europe
- Latin America
- Middle East
- North America
- South Asia



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### **Briggs Marine Contractors**

Briggs Marine is a leading UK marine contractor offering services across a range of industries specialising in coastal, offshore and nearshore operations. The Company's strengths are in delivering safe, high quality, cost-effective, multi-discipline marine-based solutions in diverse and challenging environments, on time and budget.

#### **DIT Active Regions**

- Eastern Europe and Central Asia Network
- Europe
- Middle East
- North America



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**CU Phosco Lighting**

CU Phosco Lighting are the global experts in port lighting. With expertise in the design and manufacture of high masts and LED floodlighting, CU Phosco Lighting can meet all your requirements for expansions, new builds or retrofits and refurbishments. With a customer base including PSA, DP World, APM, Hutchisons, ICTSI and many others and with installations throughout the world from North and South America, the Middle East and Africa to Asia and Australasia, CU Phosco Lighting has experience in supplying and installing state of the art turnkey solutions in even the most challenging of climatic environments.

**DIT Active Regions**

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**DockGuard Ltd.**

DockGuard is a global provider of marine fender technology and mooring solutions with more than 40 years experience serving the global marine industry. We have a ‘can do, will do’ approach and exceptional flexibility. This has earned us a reputation for delivering competitive products to the most demanding specifications - solutions that respond to the most challenging environments and tightest budgets. At DockGuard, you’ll instantly notice our confident and enthusiastic attitude to a fender challenge. We work hard to keep things as simple and straightforward as possible. Even though your requirements may be varied, complex and challenging, we think you’ll quickly recognise the importance we put on creative thinking and our ability to problem solve: And that excellence in design doesn’t have to come at an unaffordable price.

**DIT Active Regions**

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- [sales@fendercare.com](mailto:sales@fendercare.com)
- [www.fendercare.com](http://www.fendercare.com)

**Fendercare Marine**

One of the world’s leading suppliers of high-quality marine products, mooring solutions and associated services, Fendercare Marine is also the foremost provider of ship-to-ship services globally.

Committed to providing premium quality marine equipment across its entire product range, Fendercare is additionally the world’s largest retailer and lessor of Yokohama pneumatic fenders.

The company’s experienced teams have a proven track record in delivering innovative solutions, as well as bespoke design services to meet the exacting requirements of its maritime customers, civil and military, and the most stringent international safety regulations.

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**Malin Group**

Malin is committed to providing an exceptional end-to-end service within the marine sector. Underpinned by the wealth of expertise and knowledge of our staff base, and a presence in the marine industry stretching back over 100 years, Malin Group offers a comprehensive range of services and capabilities covering technical consultancy, marine fabrication, newbuild, heavy lift & transportation, zero emission marine propulsion systems, renewable energy solutions, offshore & subsea engineering and research & innovation.

**DIT Active Regions**

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## Hydrography, Surveying and the “Blue Economy”

**The fundamental concept of any port is the coming together of the sea and shore. That is when things can get more complicated, and it is vitally important that the right ships can enter safely and securely. This is where hydrography and surveying are so important.**

Mapping out key issues such as water depth, the seafloor topography and coastline, locating and recording possible obstructions, and physical features of water bodies, hydrography helps keep our maritime transportation system moving safely and efficiently, and allows ports to function.

Hydrographic surveying is the science of measurement and description of features which affect maritime navigation, marine construction, dredging, offshore oil exploration/offshore oil drilling and related activities. The results surround the assessment and publication of soundings, with details of shorelines, tides, currents,

seabed and submerged obstructions that relate to the safe navigation and in, around and leading to and from a port.

Technology is a part of the modern approach to hydrography, and UK companies are at the fore when it comes to delivering solutions to ports all over the world. UK surveying companies use the very latest equipment, and highly trained and experienced surveyors. They adhere to rigorous high standards, and invest heavily in providing the excellence that clients demand.

Building out from the hydrography and knowledge of the waters around a port allows a wider view to be taken, and companies can assist and support the adoption of policies and operations which boost the “Blue Economy”. This is the sustainable use of ocean resources for economic growth, and UK companies lead the way in translating the realities of the oceans into economic growth.

*The UK excels at:*

- **Accuracy**
- **Equipment development**
- **Experience**
- **Innovation**
- **Integration**
- **Longstanding expertise**
- **Research and development**
- **Skills and knowledge**
- **Solution delivery**



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- <https://www.gardline.com/>

### Gardline Limited

Gardline is a best-in-class provider of geophysical, geotechnical and environmental marine surveys. We offer a comprehensive package of experienced staff, dedicated vessels and state-of-the-art equipment to empower the ongoing transformation in the offshore energy market. A wholly owned subsidiary of Royal Boskalis Westminster NV, we deliver turnkey solutions and a broad portfolio of specialist activities to offshore energy companies around the world. Tailoring our services to meet our clients' changing needs, we provide second to none data acquisition, processing, interpretation and reporting.

### DIT Active Regions

- Africa
- Europe
- Latin America
- North America



- [sales@geomatrix.co.uk](mailto:sales@geomatrix.co.uk)
- [www.geomatrix.co.uk](http://www.geomatrix.co.uk)

### Geomatrix Earth Science Ltd.

Geomatrix Earth Science Ltd is a leading company within geophysical instrument sales and rentals for both offshore and terrestrial equipment. We are retained as exclusive sales representatives by many of the leading geophysical instrument and software manufacturers for products such as GPR, magnetometers, seismographs, gamma ray spectrometers, EM sounding and profiling instruments Gravity meters and resistivity meters.

### DIT Active Regions

- Africa
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- Middle East



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**NLA International Limited**

NLA International is a Blue Economy (BE) solutions company creating concepts and projects for socio-economic benefit in the marine environment and maritime operations sectors. We explore the utility of leading-edge technologies (including AI/ML and the application of satellite datasets) to address the challenges of connectivity, situational awareness, cyber security, human user interfaces and so on in remote locations. NLAI understands the BE’s huge breadth and potential, drawing on a decade’s experience and an expansive network to offer advisory and delivery services to a broad range of customers, from tech start-ups, to corporates and governments. Our service categories are BE Strategy, BE Security, BE Markets and Expert Witness, details of which can be seen at <https://www.nlai.blue/services/>. Our USPs are our network, expertise and our ability to conceive, implement and manage challenging projects in the BE.

**DIT Active Regions**

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- [info@sephydrographic.com](mailto:info@sephydrographic.com)

**SEP Hydrographic Limited**

SEP Hydrographic is a newly established survey company with more than 50 years of in-house experience, specialising in high-resolution asset inspection both above and below the waterline. The company combines specialised sensors including 3D Scanning Sonar, Multibeam Echosounder, LiDAR and photogrammetry in a single vessel pass to provide a comprehensive dataset to clients from the Port and Harbour sector.

**DIT Active Regions**

- Europe

# Maritime Law

**English law, the jurisdiction of the English courts, and arbitration in England, remains the most frequent choice for parties throughout the maritime industry internationally. This, and the wide use of English law in international port and ship finance transactions, has ensured that London is the world’s leading centre for the provision of legal services to the international maritime community.**

English contract law, which is mainly derived from the Common Law, is applied to contractual disputes far more widely than the law of any other country and is the governing law of choice for many international businesses when entering into commercial contracts.

With its independent judiciary and established system of legal precedent, English law and dispute resolution services provide businesses with certainty and clarity when engaging in cross-border commercial activity. Though there is flexibility too. As English law is not restricted by a written code, it is able to adapt rapidly to new developments in shipping and international business. It also recognises “freedom of contract” and, in arbitration “party autonomy” and so aims to give effect to the contractual intention of commercial parties. Almost uniquely England offers a right of appeal from an arbitration award on a point of law (something which is not ordinarily available in other major maritime centres), Thus, it is the basis of conducting business with a high degree of certainty and with safeguards.

Another unique and attractive aspect of the English legal system is the ability of the winning party to recover the majority of costs – not merely tariff or administrative fees, which helps discourage baseless claims simply to force a settlement. While court fees are low and because of the number of experienced judges and arbitrators available, cases can be heard quickly and, where necessary, urgently. English qualified judges and arbitrators are best qualified to determined English law disputes.

The pre-eminence and use of English law mean that the UK is a global maritime arbitration centre, and legal services in the maritime sector are routinely required for contentious and non-contentious work relating to a wide range of matters including charterparties, ship and rig building contracts, and agreements concerning finance, commodities, energy, insurance, cargo, collision, salvage, general average and pollution. Many disputes are decided in the specialised Admiralty and Commercial Courts, or through arbitration and various other private forms of dispute resolution including mediation.

Maritime lawyers and firms in the UK are widely respected and recognised, and they provide world class support for their clients, both in cases brought in the UK, but so too in advising on the structuring and documentation of maritime and financial transactions and assisting in settlement of disputes short of litigation or arbitration.

*The UK excels at:*

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• <b>Choice of parties</b></li><li>• <b>Client support</b></li><li>• <b>Cost recovery</b></li><li>• <b>Flexibility</b></li><li>• <b>Governing law</b></li><li>• <b>Largest arbitration footprint</b></li></ul> | <ul style="list-style-type: none"><li>• <b>Legal infrastructure</b></li><li>• <b>Legal standing</b></li><li>• <b>Mediation</b></li><li>• <b>Pre-eminence</b></li><li>• <b>Recognised jurisdiction</b></li><li>• <b>Respected standing</b></li><li>• <b>World class lawyers</b></li></ul> |
|--|--|





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### Birketts LLP

Birketts provides specialist advice for shipowners, charterers, P&I and Defence Clubs, international traders, freight forwarders, marine insurers, brokers and inspection companies.

We have established a reputation as a leading UK-based shipping team. Many of us began our careers in London shipping firms, but our location in Ipswich now allows us to continue to offer City-style service at competitive, out-of-London fee rates.

We have wide experience of acting in complex, high value multi-jurisdictional and cross-border disputes and we are familiar with leading arbitral institutions and procedures and have a strong ethos of achieving commercially sound outcomes.

#### DIT Active Regions

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- [www.clydeco.com](http://www.clydeco.com)

### Clyde & Co LLP

Our marine lawyers are based in over 25 locations across five continents, delivering comprehensive, commercially focused advice in all time zones.

Our history of over 80 years' experience in the marine market, making us one of the oldest maritime law firms in the world, enables us to keep our focus forward, helping our clients respond to fundamental changes in an increasingly challenging geopolitical and regulatory landscape.

We work closely with our insurance, trade and energy teams to provide market-leading, cross-sector support to those who rely on, support and facilitate marine transportation.

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### HFW

HFW has one of the largest legal teams specialising in the acquisition, disposal, development and operation of national and international ports and terminals. Our transactional and dispute resolution lawyers have a wealth of experience, having advised on more than 100 port projects in more than 45 countries around the world. We act for clients across the entire industry, from port and terminal operators and users, to national port authorities, governments, commodity trading companies, investment funds and financial institutions.

#### DIT Active Regions

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### Hill Dickinson LLP

Hill Dickinson is a leading and award-winning international commercial law firm with more than 850 people, including 185 partners and legal directors. Established in 1810, we have a successful track record spanning more than 200 years.

From offices in London, Liverpool, Manchester, Leeds, Greece, Singapore, Monaco and Hong Kong, we deliver advice and strategic guidance spanning the full legal spectrum.

As a full-service marine practice, we offer expertise across the full complement of marine and commercial disciplines including: shipping, personal injury and regulatory, international trading and commodities, intermodal transport and logistics, ship finance, corporate and general finance, and superyachts.

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- <https://www.incegd.com/>

### Ince

With a heritage reaching back 150 years, Ince is a dynamic international legal and professional services firm, with offices in eight countries across Europe, Asia and the Middle East. With over 500 people, including over 100 partners worldwide, Ince provides legal advice and strategic guidance to clients in the global trading community in relation to commodities, energy and natural resources matters. Matters include financing, trading, hedging, storage, transportation and logistics, insurance and end use, regulatory issues and sanctions, environmental issues and disputes.

#### DIT Active Regions

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- China
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- South Asia



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### Norton Rose Fulbright

Norton Rose Fulbright's experience over many years in advising the ports industry, our market leading shipping; transport; infrastructure and commodities teams; and our deep knowledge of the unique challenges faced by each of our clients mean that we are ideally positioned to provide comprehensive advice on the full spectrum of port and terminal related issues.

We deliver state of the art industry knowledge and practical legal advice on complex ports matters in emerging and developed markets.

#### DIT Active Regions

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## Maritime Safety, Security and Risk Management

**Safety, security and the management of risks facing ports are vital to any operation. Ports can be hazardous environments, and the risks need to be carefully controlled. Cargo, ships, cranes, vehicles, heavy machinery, working at height, and mooring lines are just some of the more obvious hazards. While there are confined spaces to consider and even hot work. The importance of safety is at the core of all ports, and effective management and support from expert consultants and practitioners are vitally important.**

From a security perspective, there is a risk from terrorist attacks, albeit rare, however, ports can be potential routes for crime, for stowaways, smuggling, and the storage of dangerous materials can lead to devastating consequences if not handled, stored and controlled effectively.

It is not just in the port itself, the waterways leading to and around a port, to the highways and access points, and the storage

facilities and working areas, there are many potential vulnerabilities which need to be recognised, assessed, understood and ultimately managed.

Assessment of risks, development of plans, and the provision of expertise to mitigate and manage potential problems, these are just some of the options available. UK companies are global leaders in maritime safety and security, and are presently working in many ports, from the biggest through to niche, specialised operations.

It is vital that port owners and operators invest in the right measures, systems and resources to safeguard their people, assets and operations. UK companies, in both safety and security, mirror that investment. They have unrivalled experience, and a longstanding history of driving positive change, protecting and supporting clients globally.

#### *The UK excels at:*

- **Asset protection**
- **Development of solutions**
- **Global reach**
- **Longstanding history**
- **Relationships**
- **Research and development**

- **Revenue protection**
- **Risk data and modelling**
- **Standards and compliance**
- **Systems and solutions**
- **Understanding Risks**
- **Unrivalled experience**





- [enquiries@ambrey.com](mailto:enquiries@ambrey.com)
- [www.ambrey.com](http://www.ambrey.com)

### Ambrey Shipyards Ltd.

Ambrey Shipyards is based at Hythe in the United Kingdom. We are a centre of marine excellence, offering both ship building and maintenance services. Our shipyards have direct access onto the English channel. Ambrey group has a distinguished track record in the maritime security industry working with Shipping Agents and Naval forces across the world. We can supply specialist maritime support globally.

#### DIT Active Regions

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- <https://www.lr.org/en/contact-us/>
- [www.lr.org](http://www.lr.org)

### Lloyd's Register

We're a leading international provider of classification, compliance and consultancy services to the marine and offshore industry, helping our clients design, construct and operate their assets to the highest levels of safety and performance, using our expertise and over 260 years' experience to deliver the smart solution for everyone.

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- [office@marico.co.uk](mailto:office@marico.co.uk)
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### Marico Marine

Marico Marine is an independent marine consultancy company providing solutions for the marine and offshore energy sectors worldwide. Some of the marine consultancy services that we perform are marine risk assessment, marine accident investigation, port consultancy and marine risk management. Our team of master mariners, marine engineers, naval architects, data specialists and marine technologists have extensive experience in all aspects of shipping, navigation systems, marine accident investigation and marine risk assessment. Our clients include government agencies, flag states, ship owners, charterers, P&I clubs, harbour authorities and leaders in the offshore renewable energy industry.

#### DIT Active Regions

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- [www.mast-security.com](http://www.mast-security.com)
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### MAST (Maritime Asset Security and Training Ltd)

MAST are an international risk management company who specialise in physical security, technology and consultancy. From armed and unarmed security on international vessels, to physical security guards, K9 Units, and protection teams on ports and commercial properties around the UK. MAST self deliver all manner of security provisions to make the world and safer place to live and work.

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| • Eastern Europe and Central Asia Network |               |



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### MIRIS International

MIRIS provides bespoke security solutions to meet your shipping, corporate and personal requirements both in the UK and overseas. Our risk management consultants deliver a range of services from threat assessment, journey management and close protection, through to securing tankers operating in the high risk waters of Nigeria, Togo and beyond. Large yachts, property, vehicles, and private aircrafts are all secured by professional teams supported by experienced management staff.

#### DIT Active Regions

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- Asia-Pacific
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### Neptune P2P Group

We are international risk management and maritime security experts with proven experience of keeping people, assets and organisations safe. We can support your needs anywhere in the world from our bases in the UK and the UAE. We only employ the best, and our track record is second to none. Whether you need our expertise in risk consultancy or our specialist security services, you'll be in safe hands with us.

#### DIT Active Regions

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## Port Operation and Management

**The operational management of ports and terminal is a challenge which reacts to multiple requirements and reflects the needs of a specific port to provide access and services for cargo, vessels, people and employees. There are many considerations, and modern port models are under growing pressure in increasingly competitive cargo markets.**

There are the safety aspects to consider, and as well as the efficient and correct handling and storage of containers. However, there are also constant demands for increased productivity - through expansion or more efficient use of existing assets. Capacity is an ongoing issue for many ports, and effective management is key to ensuring that demands are met, and in the correct way.

In many ways, effective port management is about a balancing act, in which problems are solved. Cargoes are stored safely and securely, they are moved seamlessly into and out of the port, and client needs are well serviced.

There are multiple challenges, from the provision of Vessel Traffic Services, through to ensuring communications, forecasting and having a port capable of handling current and future demands.

UK companies specialise in full or partial management services and can provide the expertise and insight to ensure and safeguard port performance. They offer the resources, insight and skills to drive port businesses forward, and from back office to front line assets can ensure that costs are controlled, services maximised and that ports develop and grow to meet their potential.

*The UK excels at:*

- **Asset control**
- **Capacity optimisation**
- **Client support**
- **Development**
- **Expansion management**
- **Insight**
- **Investment**

- **Management systems**
- **Maximising returns**
- **Organisation**
- **Promotion**
- **Resource allocation**
- **Understanding**





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- [www.abpmer.co.uk](http://www.abpmer.co.uk)

### ABPmer

Part of Associated British Ports Group, ABPmer is uniquely placed in providing specialist advice to ports and terminals.

We prepare bespoke port master plans, offer design support on new/change of use facilities and advise on consents and licensing, dredging, safety of navigation, adapting to climate change and environmental issues. We can also assist port and terminal operators meet their risk management obligations under the UK Port Marine Safety Code.

#### DIT Active Regions

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- [www.port-consultants.com](http://www.port-consultants.com)

### Independent Port Consultants

Independent Port Consultants was formed in 2001 by a group of port and shipping experts representing a wide range of professional disciplines within the sectors. Since then, it has developed into a broad-based and talented pool of UK and overseas consultants. Members have extensive and high-level management experience in the ports, maritime transport and supply chain industries. Their expertise is based on first hand practical experience gained over many years in over 100 countries, covering most aspects of port, terminal, shipping, logistics and transport activities.

#### DIT Active Regions

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### Orcades Marine Management Consultants Ltd.

Our port and terminal operations consultants have gained their credentials from practical hands-on industry experience at both executive and operational levels. We undertake assessment and external auditing to ensure duty holders and management are fully appraised and aware of their obligations and responsibilities. We provide due diligence to meet new navigational and operational safety requirements. We undertake port master planning and provide innovative solutions for economic and efficient operations and port management, working worldwide.

#### DIT Active Regions

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- [www.portautomation.com](http://www.portautomation.com)

### Port Automation

#### (a trade name of International Terminal Solutions Ltd)

Port Automation provides real-time mapping of operations, monitoring, reporting, remote management and more. As an independent partner in control and automation for ports and terminals we create solutions that work! We deliver increased operational efficiency and safety from individual components for tracking and access control to full system suites for fleet management and process automation.

#### DIT Active Regions

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- Middle East
- South Asia



- [info@port-processes.com](mailto:info@port-processes.com)
- [www.port-processes.com](http://www.port-processes.com)

### Port Processes Ltd

Port Processes provides consultancy on economic and financial analysis for port and maritime services projects, trade facilitation assignments related to port processes and procedures, and terminal management systems/monitoring frameworks for concession agreements.

### DIT Active Regions

- Africa
- Asia-Pacific
- Eastern Europe and Central Asia Network
- Europe
- Middle East
- South Asia



- <https://portiamanagement.com/>
- [admin@portiamanagement.com](mailto:admin@portiamanagement.com)

### Portia Management Services

Portia Management Services (Portia), established in 1978, are the UK's only independent port operations and management company. Portia are responsible for operating and managing commercial ports in developed and developing international markets. We also provide advisory and training services for all aspects of land and marine operations and management.

### DIT Active Regions

- Africa
- Asia-Pacific
- China
- Eastern Europe and Central Asia Network
- Europe
- Latin America
- Middle East
- North America
- South Asia

## Port Planning, Infrastructure and Design

**Ports historically used to develop organically, but modern terminals require a vast amount of planning, design and infrastructure to be considered. Today the physical factors affecting the design of marine facilities include wind, waves, ice, tides, and currents. While there are many operational areas to factor in, such as cargo and vessel types and sizes. While there is also the international functions and different aspects of port management to consider, with customs and control of goods to factor in.**

From the basic fundamentals of deciding where to position a port or the demands to redevelop an existing facility, there is much to consider. There is the port master planning, which assesses the functions and organisation against a planning methodology. Then come the design and considerations for wet areas, where ships will manoeuvring and how the hydrodynamic behaviours may impact approach channels, port basins and berth areas.

The design and planning of the terminal are key, with the services, terminal components, types of terminals, capacity, and dimensions to be factored in and addressed.

From smaller boutique consultants, to giants of the global port industry, UK companies offer all that owners and investors could need to bring plans to fruition, to design ports which will stand the test of time, and which have the right infrastructure to grow and deliver to their potential.

There is a vast amount of experience in the UK, and companies can provide the full complement of environmental, sustainability, transportation, civil and structural consultancy services. In addition, they have vast amounts of experience providing support for port facilities such as the design of piers, sea walls, dock pumping stations and outfalls as well as offering specialist advice on maintenance dredging.

*The UK excels at:*

- **Data and analysis**
- **Design**
- **Environmental expertise**
- **Expertise**
- **Green solutions**

- **Infrastructure development**
- **Investor relations**
- **Market knowledge**
- **Modelling**
- **Planning**
- **Project management**





- [info@becketttrankine.com](mailto:info@becketttrankine.com)
- [www.becketttrankine.com](http://www.becketttrankine.com)

### Beckett Rankine

Beckett Rankine is a specialist consultancy, focusing entirely on marine development projects. Planning and engineering design of refurbishment and new build for ports and other marine infrastructure. Working in UK and across the world, often together with other specialists to deliver personalised service for clients on ferry, container, bulk and LNG terminals as well as small craft, marine leisure and historic vessel projects.

#### DIT Active Regions

- Africa
- Asia-Pacific
- China
- Eastern Europe and Central Asia Network
- Europe
- Latin America
- Middle East
- North America
- South Asia



- [enquiries@mdst.co.uk](mailto:enquiries@mdst.co.uk)
- [www.mdst.co.uk](http://www.mdst.co.uk)

### MDS Transmodal Limited

MDS Transmodal (MDST) is a transport economics consultancy which specialises in maritime and all other modes of freight transport. MDST works with senior management in the public and private sectors to provide strategic advice based on quantitative analysis, modelling and sectoral expertise. Its proprietary databases and models cover global trade and container shipping capacity and the economics of the maritime sector. Clients include UNCTAD, the World Bank, governments, ports and terminal operators, financial institutions, global shippers and shipping lines and a wide range of professional services companies.

#### DIT Active Regions

- Africa
- Asia-Pacific
- China
- Eastern Europe and Central Asia Network
- Europe
- Middle East
- South Asia



- [inquiry@moffattnichol.com](mailto:inquiry@moffattnichol.com)
- <https://www.moffattnichol.com/>

### Moffatt & Nichol

A truly global infrastructure advisory firm, Moffatt & Nichol provides engineering and consulting services to clients in the marine terminal, transportation, energy, environmental, federal, and urban development markets around the world. Driving innovation in port, water, and transportation infrastructure, our creative people provide practical solutions for our clients' most complex projects.

#### DIT Active Regions

- Africa
- Asia-Pacific
- Eastern Europe and Central Asia Network
- Latin America
- Middle East
- North America
- South Asia



- [www.orcadesmarine.co.uk](http://www.orcadesmarine.co.uk)
- [info@orcadesmarine.co.uk](mailto:info@orcadesmarine.co.uk)

### Ramboll

Ramboll are a leading international multi-disciplinary consultancy, our focus is on sustainable development and net zero carbon. We assist clients around the world developing buildings, transport & energy infrastructure whilst achieving environmental excellence. Our international portfolio for Port developments range from terminal expansions, harbour and coastal protection through to mega port development.

#### DIT Active Regions

- Africa
- Asia-Pacific
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- North America
- South Asia



- [www.royalhaskoningdhv.com](http://www.royalhaskoningdhv.com)
- [stuart.white@rhdhv.com](mailto:stuart.white@rhdhv.com)

**Royal HaskoningDHV**

We are world leaders at the development of maritime infrastructure. We work with contractors, developers and operators from development of the business case through design and procurement to construction and improvement of operational performance. Our team includes market specialists, procurement advisors, environmental scientists, engineers, software developers, operational specialists across all sectors and quantity surveyors. Our services are enhanced by our blend of maritime domain knowledge with digital and data skills as we help to sustainably develop and enhance the operation of marine infrastructure.

**DIT Active Regions**

- |   |                 |
|---|-----------------|
| • Africa                                  | • Europe        |
| • Asia-Pacific                            | • Latin America |
| • China                                   | • Middle East   |
| • Eastern Europe and Central Asia Network | • North America |
|   | • South Asia    |



- [info@vectorpts.co.uk](mailto:info@vectorpts.co.uk)
- <https://www.vectorpts.co.uk/>

**Vector Port and Transport Solutions Ltd**

Vector Port and Transport Solutions offers a considerable wealth of expertise in Port operations, Container, Steel and Bulk terminals, as well as Inland Terminals. Our expertise covers the different phases of terminals from designing phase over assessment of management to day-to-day operations.

**The key areas of activities are:**

- Performance and Efficiency of Operations, Engineering, Commercial and IT systems
- Organisation Audits and Business Due Diligence
- Implementation of Terminal Operating Systems (Change Management)
- Tender Specification and Management for Port Equipment
- Claims and Litigation (Business interruption mitigation)

**DIT Active Regions**

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|---|-----------------|
| • Africa                                  | • Europe        |
| • Asia-Pacific                            | • Latin America |
| • China                                   | • Middle East   |
| • Eastern Europe and Central Asia Network | • South Asia    |

# Smart Port Solutions

**While technology is a key enabler for ports and terminals, there has been a step-change in the way that information and connectivity are used in the industry, the advent of the “smart port”. This is a port which leverages digital technologies to continually improve the safety, efficiency, yield, and environmental impact of these trading operations.**

The use of data and data analytics, the development of artificial intelligence (AI) and machine learning, advanced sensor technology, and improvements in robotics. All of these technologies have a major impact on the ways in which ports operate, what they can achieve, and the ways in which they do it. Making traditional ports into smart ports.

The smart port concept is part of a broader technological shift, which creates a pathway towards the automated, partly-digitised equipment of today, the remote operation of equipment, and the development of autonomous maritime systems, both at sea and onshore.

UK companies are working towards the next generation of data, analysis and indicators, which means they can provide the solutions to make all ports smarter and ultimately as smart as they want or need to be. The challenge for ports is to use technologies to improve performance. To fully embrace the opportunities, ports must span both the physical and digital domains. UK companies are at the cutting edge of developments, with the innovations, data, systems and digital tools to make a difference.

*The UK excels at:*

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• <b>Artificial intelligence</b></li><li>• <b>Automation</b></li><li>• <b>Blockchain</b></li><li>• <b>Client guidance</b></li><li>• <b>Data generation and management</b></li><li>• <b>Digital Twinning</b></li></ul> | <ul style="list-style-type: none"><li>• <b>Digitisation and Digitalisation</b></li><li>• <b>Intertwining of solutions</b></li><li>• <b>Research and development</b></li><li>• <b>Sensors</b></li><li>• <b>Storage</b></li><li>• <b>System development</b></li><li>• <b>Technology</b></li></ul> |
|---|---|





- [hello@intelligentcargo-systems.com](mailto:hello@intelligentcargo-systems.com)
- [www.intelligentcargosystems.com](http://www.intelligentcargosystems.com)

### Intelligent Caro Systems

Intelligent Cargo Systems develops cargo and port operations monitoring software. Their flagship product CargoMate provides carriers with worldwide, real-time cargo operations progress direct from their vessels; enabling advance warning of delay events and early departures, resulting in reduced fuel consumption and emissions.

#### DIT Active Regions

- Africa
- Asia-Pacific
- China
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- North America
- South Asia



- [info@3deo.com](mailto:info@3deo.com)
- [www.3deo.com](http://www.3deo.com)

### 3DEO NI Ltd

Our cutting edge web-based 3D visualisation software makes data easy to access and easy to understand helping businesses make better strategic and operational decisions. Capture any data from any source, and visualise it anytime, anywhere in your browser. Your business in real time, at your fingertips.

#### DIT Active Regions

- Europe



- <https://www.iongeo.com/markets/portsandharbors/>
- [marlin.sales@iongeo.com](mailto:marlin.sales@iongeo.com)

### ION

ION is an innovative, asset light global technology company that delivers powerful data-driven decision-making to offshore energy, ports and defence industries. ION has been a leading technology innovator for over 50 years. While ION's traditional focus for its cutting-edge technology has been on the E&P industry, the company is now broadening and diversifying its business into relevant adjacent markets such as offshore logistics, ports, defence and marine robotics.

#### DIT Active Regions

- Africa
- Asia-Pacific
- China
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- South Asia



- [info@midstreamlighting.com](mailto:info@midstreamlighting.com)
- <https://www.midstreamlighting.com/>

### Midstream Lighting

Midstream Lighting are a leading designer and manufacturer of advanced, robust, best-in-class LED lighting solutions for ports, terminals and maritime equipment. Our purpose-built lighting solutions are designed to tackle the technically precise demands of the world's maritime industry. Manufactured to meet the highest quality standards and regulations of each region they're deployed in, our leading edge technology provides both new build and easy retrofit solutions that vastly improve lighting conditions and operational efficiencies, as well as driving down energy and maintenance costs.

#### DIT Active Regions

- Africa
- Asia-Pacific
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- South Asia



- [info@oceanwise.eu](mailto:info@oceanwise.eu)
- [www.oceanwise.eu](http://www.oceanwise.eu)

### OceanWise Ltd

OceanWise is an independent company using our expertise in marine data to solve offshore environmental and engineering challenges to support port operations and efficiencies. OceanWise helps ports and harbours adopt a modern approach to data and information management to make their operations and projects:

- Safer and more resilient, with deeper insight and improved decision-making
- Easier to manage, with modern and efficient tools
- Less costly, with best practices and streamlined processes

#### Activities undertaken:

- Monitoring - We help ports and harbours monitor the environment and share weather, tidal and other data easily and efficiently
- Software - We provide enterprise GIS and productivity tools
- Data - We provide intelligent marine and coastal mapping data
- Training and Governance - We provide capacity building, training and mentoring

#### DIT Active Regions

- Africa
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- South Asia

## POLE STAR

- [sales@polestarglobal.com](mailto:sales@polestarglobal.com)
- <https://www.polestarglobal.com/>

### Pole Star

We develop pioneering technologies, empowering maritime insight to inform your real-world decisions. We are proud to work with governments and businesses across the supply chain, playing an essential part in creating a transparent, secure, and compliant operating environment. Since 1998, we have been turning complex data into accessible insight across regulatory conformance, sanctions screening, trade compliance, tracking, monitoring, and ship security. Our wide range of solutions are designed specifically to enable time-critical decisions and mitigate risk across all facets of maritime activity - from cross-border trade to the monitoring of territorial waters and everything in between.

#### DIT Active Regions

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- South Asia



- [enquiries@zizo.co.uk](mailto:enquiries@zizo.co.uk)
- [www.zizo.co.uk](http://www.zizo.co.uk)

### Zizo Software

Zizo enables organisations of any scale to work with their data effectively to drive improved performance and increased efficiencies.

Capabilities include: Data Engineering, Data Modelling, Data Extraction, Data Integration, On-Premise or on Cloud Data Warehouse, Business Intelligence, Reporting, Data Science, Complex Analytics (Predictive, Diagnostic, Cognitive), AI/ML, Web Application Development.

In essence Zizo are able to provide insight across business areas and across sectors, creating data-led opportunities that have the power to digitally transform businesses.

#### DIT Active Regions

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## Supporting UK Port Services



**The Department for International Trade's (DIT) 5-year plan promoting the UK's world class global maritime offer sets out the support to the UK maritime sector as it seeks to capture significant global market share, and how it aligns to the Maritime2050 strategy.**

As part of these efforts to support UK business, DIT's maritime team is seeking to connect UK service providers to international buyers. While also developing relationships with the DIT teams internationally, ensuring that demand in key markets can be matched with the appropriate supply.

We are working to communicate the values of UK companies, and assisting them to compete and win business based on quality

and service. As reflected in the standing of the sector, the positive reputation for maritime innovation, and as a global leader. In order to realise the ambitions set out in Maritime2050, there is a focus on maximising the UK strength in the port sector, ensuring the UK competitive advantage is retained and enhanced. UK companies have the skills, knowledge, experience and contacts to deliver, and DIT is working to ensure that we encourage and support exports and can build a pipeline of work into the UK.

**Contact:**  
**[maritime@trade.gov.uk](mailto:maritime@trade.gov.uk)**



## Notes

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## Notes

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Department for  
International Trade

**great.gov.uk**

## **DIT**

The Department for International Trade (DIT) helps businesses export, drives inward and outward investment, negotiates market access and trade deals, and champions free trade.

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