



## Life of Asset Services



## Group Services

At C-MAR Group we have more than twenty years experience in the marine and energy service industries. Our business is built on four firm foundations; quality, value, experience and expertise.

These fundamental values are evident throughout the whole supply chain of our business and mean that we can deliver optimal operational efficiency to our clients whilst guaranteeing the highest standards of safety, health, environment and quality.

The priority at C-MAR is to form a strong alliance with our customers around the globe to maximize their operational effectiveness and deliver strategic solutions to industry wide problems.

As global providers of marine, manpower, engineering and support services to the energy and marine sectors, C-MAR Group are an internationally renowned service provider offering a comprehensive range of specialist services. Our aim is to proactively address the complex challenges experienced in today's marine and energy markets. With more than 1,000 employees in twelve strategic locations around the globe we provide an unparalleled portfolio of integrated service offerings to the marine and energy service sectors. Our four core business streams consist of Marine, Engineering, Training and Consultancy. Harnessing our extensive offshore oil and gas experience with our expert marine capability, we deliver a first class integrated service model to an ever-widening base of global clients.

- Design and Consultancy
- Build Supervision
- Failure Mode and Effects Analysis (FMEA)
- Commissioning, Sea Trials, Audits
- Electrical and Instrumentation
- Classification and Assurance
- Dynamic Positioning Training
- Subsea and Fluid Power Training
- Marine Crewing, Operations and Procedures
- Technical Support including Deepwater Operations
- Vessel Maintenance
- Dynamic Positioning Operations and Consultancy
- Subsea and Well Control
- Maritime Casualty Response
- Maritime Incident Investigation
- Expert maritime advice and evidence
- Marine Warranty Surveying
- Maritime Loss Prevention and Damage Surveys
- Provision of Special Casualty Representatives (SCRs) for Salvage Operations
- Vessel Upgrades





## Our Consultancy Team

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Our Consultancy operation is focussed on providing high-quality maritime consultancy services to the marine and energy industries through well-qualified and experienced personnel who are responsive to our clients' needs. Each of our consultants has attained the highest level of professional qualification appropriate to their discipline and has at least two decades of professional experience. Several members of the team have attained additional academic and vocational qualifications appropriate to maritime operations and, following their seagoing experience, have held senior shore-based maritime roles. Our senior personnel have extensive surveying and consultancy experience and two members of our team are Special Casualty Representatives (SCRs), approved for appointment on salvage cases performed under LOF-SCOPIC. We encourage the Continuous Professional Development of our team, and actively support our industry's Professional Bodies.

### What we do

We routinely perform a wide range of services: from routine loss prevention surveys to attending major casualties; from desk based studies to field audits of marine operations; from providing expert advice to giving expert evidence in Court and Arbitration proceedings. Whatever the role, we strive to perform our work to the same consistently high standard and with the same meticulous attention to detail.

Further details of our services are given overleaf.

# Our Services



## Casualty Response

Our personnel have significant experience in attending marine casualties to assess the nature and extent of damage sustained and/or to investigate the causes which led to the casualty incident occurring. We have particular experience with the following types of casualty, and associated response operations:

- Collisions
- Strandings
- Pollution
- Fire
- Fixed and Floating Object damage
- Cargo damage
- Salvage operations
- Wreck removal operations
- Pollution response operations

## Litigation Support

We are regularly engaged to provide expert advice and evidence in a variety of maritime claims and disputes, providing oral and written evidence in cases involving, for example:

- Collisions, strandings and other navigational issues
- Marine operations, including offshore marine operations
- Cargo damage, including liquid cargo contamination
- Salvage operations
- Fixed and floating object damage
- Unsafe port allegations
- Hull and machinery disputes
- Bunker disputes
- Personal Injuries

We utilise the Maritime Accident Data Analysis Suite (MADAS) to integrate and display electronic data from VDRs and other sources, allowing the effective analysis of navigational incidents.

## Surveying

We undertake a range of general marine surveys, inspections and audits across most types of vessels. Our services include:

- Pre-purchase inspections
- P&I condition surveys
- Loss prevention surveys and audits
- Vessel On/Off Hire surveys
- Vessel Hull and Machinery (H&M) surveys
- Cargo condition and quantity surveys
- Damage surveys: vessel, cargo and port facilities
- IMCA Common Marine Inspection Document (CMID) surveys
- OCIMF Offshore Vessel Inspection Database (OVID) surveys
- International Safety Management (ISM) audits
- Marine Warranty Surveys (MWS) of project cargoes

## Marine Consultancy

We provide marine and engineering consultancy services in the following areas:

- Crew Resource Management
- Fleet studies and assessments
- Navigation risk assessments
- Marine operations, including offshore marine operations
- Preparation of vessel manuals
- Vessel Traffic Management planning
- The maritime aspects of offshore renewable energy developments
- The Port Marine Safety Code
- Hydrographic surveying



## Classification & Assurance

We provide services to assist with the design and integration of component parts and systems of Dynamically Positioned (DP) vessels. Our team of experienced engineering professionals offer an unrivalled wealth of knowledge in the design, build and operation of DP vessels.

**We have extensive experience in the compilation of reports or specifications relating to:**

- Preparation of design schematics and Classification submission documents
- Original design research for switchboard layouts, bridge layouts and DP operations covering class required redundancy and operational considerations
- Stand-by work for equipment installation and build process
- Attendance as owner representative for DP and automation system factory acceptance tests to ensure the correct level of automation process is delivered
- Preparation of Failure Mode and Effect Analyses (FMEA) for the vessel to be approved by the Classification Society, builder and owner
- Preparation of the Sea Trials Test Programme to verify the conclusion of the FMEA
- 3rd Party Auditors to conduct the Sea Trials Test Programme
- 3rd Party Auditors for yearly trials, audits and CMID's
- Vessel specific DP Operations Manuals
- Operational reviews and incident studies.

Our global coverage allows us to offer our services from a host of international bases and we guarantee specialist personnel will deliver a comprehensive, integrated service wherever it is needed in the world.

Harnessing our wealth of knowledge and expertise, our clients benefit from in-depth, in-house specialists who can cohesively design, compile, analyse and produce all the required documentation and reports for Dynamically Positioned vessels.



## Electrical & Instrumentation

We are able to provide electrical analysis, design and commissioning support through practical experience of DP vessel requirements and the use of sophisticated simulation software covering both high voltage distribution and control systems.

Our engineering team can develop conceptual electrical system design to meet redundancy requirements and electrical system ratings, including calculations and submissions to class. We also provide interface requirements and definition including termination diagrams and onsite commissioning for HV power systems through to complex control systems.

Our global coverage allows us to offer our services from a host of international bases and our specialist personnel will deliver a comprehensive, integrated service wherever it is needed in the world.

Harnessing our wealth of knowledge and expertise, our clients benefit from in-depth, in-house specialists who can diagnose and rectify electrical system projects that have been offline or problematic.

### We provide:

- Electrical system design for high voltage distribution systems and control systems that meet industry requirements
- Classification submission documentation including all required electrical calculations for electrical ratings, short circuit, arc flash, load flow, harmonic studies, and device & protection coordination
- Control system operating philosophy for UMS/PMS and automation systems
- Integration and Commissioning procedures
- Onsite commissioning support personnel for HV and control systems.



## Subsea

Our Subsea and Well Control service covers traditional exploration drilling equipment such as BOP's, accumulators, surface and subsea control systems including the associated equipment and general rig hydraulic installations.

C-MAR's subsea engineers have the capability to assist with pipe handling and racking systems, specialised automated drill floor equipment, travelling gear and all well control related equipment.

We recognise the cost implications of rig downtime due to inefficient or delayed subsea operations. With this in mind, we act promptly to assist our clients to get back online in order to achieve an optimum production regime.

Recognising international standards and guidelines, C-MAR Engineering are members of the International Association of Drilling Contractors (IADC) and C-MAR America are members of the American Petroleum Institute (API).

Our global coverage allows us to offer our services from a host of International bases and our specialist personnel will deliver a comprehensive, integrated service wherever it is needed in the world.

Harnessing our wealth of knowledge and expertise, our clients benefit from in-depth, in-house specialists who can diagnose and rectify subsea system projects that have been offline or problematic.

### Experienced service personnel with expertise in:

- Project management in partnership with OEM vendor – experience and ability to lead projects from conception through to final commissioning
- SPS project team – Supervisor led teams capable of supplying 100% continuity on 5 yearly inspections on BOP and subsea related components
- Project engineering – Shore based or offshore projects involving upgrading or replacing of subsea well control related equipment.
- Audit – Third party and client audit services to API standards
- Subsea equipment commissioning – experienced personnel with the organisational expertise to lead teams or work independently
- Rotational offshore subsea crew – senior subsea engineers and assistants with MUX and conventional BOP control systems experience. Manpower during rig moves
- DSC, CMC and MRT's BOP-routine and bespoke services, Riser inspection and testing HPU control experience on all major OEM brands. All services can be undertaken in offshore or onshore environments.
- NDT and dimensional control inspection work on drilling and subsea components by qualified inspectors



## Vessel Management

We undertake ad-hoc or full crew/vessel management for a variety of vessel types working across the world's ocean. We have knowledge and understanding of the needs of those engaged in all offshore operations, including diving (air and saturation), cable laying, ROV support, heavy lift, exploration drilling, well intervention, trenching and maintenance.

The C-MAR Group has extensive experience in the full management of Diving Support vessels covering all technical and operational requirements.

## Crewing

C-MAR crewing capabilities are based on twenty years of experience in providing the right people, at the right time, in the right locations. Adding value to any project is paramount, so the group applies its in-depth industry knowledge to each client's specific operation and then supplies competent, specialist personnel based on customer's need. A full range of crews can be provided, whether it is Marine or Specialist crew.

| Marine                     | Specialist Crew          |
|----------------------------|--------------------------|
| Masters                    | Dive Technicians         |
| DPOs & Deck Officers       | Life Support Technicians |
| Chief Engineers            | ETOs                     |
| Engineering Officers       | Electricians             |
| Deck & Engine Room Ratings | Crane Operators          |
| Hospitality Crew           | Riggers & Welders        |

## Ad-Hoc Placement

We can provide cost-effective, highly qualified, experienced crews from around the world on a 24/7 basis from all our international locations.

## Crew Management

The full management of vessels crew is one of our core capabilities. As crew managers we undertake the full scope of management operations required by our ship-owner clients, ensuring that each vessel we are responsible for is manned with qualified and well-trained officers and ratings. We perform all crew-related functions, including recruitment and selection, labour/union relations, long-term strategic planning and pool arrangements, training, education and safety-instruction courses and travel arrangements.

## Technical Management

We provide competent personnel to supervise the maintenance and general efficiency of vessels, arranging and supervising dry dockings, repairs, alteration and maintenance to the required standards of Flag and Classification.

Our highly trained technical consultants can project manage conversions and modifications, supervise new builds and conduct vessel inspections, as well as carry out new purchase and condition surveys.

C-MAR has in-depth experience in damage and mechanical failure investigations and technical auditing.



## Dynamic Positioning Training

C-MAR's Dynamic Positioning training centres, DP Centres (DPC), are the largest provider of accredited DP training services in the world. With over ten years' experience providing team and individual training both afloat and ashore, the DPC brand has a reputation for high quality training delivery, either to the recognised Nautical Institute standard or tailored specifically to the client's requirement.

The five modern and cutting-edge DPCs are located at strategic transport hubs in London, Rio de Janeiro, Mumbai, Singapore and Split, Croatia. All instructors have at least five years' experience of DP operations in a broad range of platform types, from high-end drilling and dive support vessels to offshore support, pipe layers and cable layers and a range of DP equipment types. Practically focussed training delivery is supported by the DPC's own leading industry training manuals and the learning experience is tuned individually to the student's needs.

The DPCs offer operator training on Kongsberg and Converteam systems, equivalent to DNV Standard for Certification No. 2.14 Class B simulators, and can provide manufacturer approved maintenance training on Converteam C series DP systems in accordance with the International Marine Contractors Association (IMCA) guidelines.

## Approved/Accredited training:

- Nautical Institute – DP Operator Basic, Advanced and Refresher courses.
- Converteam – Maintenance courses.

## DPC training:

- Converteam and Kongsberg equipment familiarisation for operators and maintainers.
- Conceptual/appreciation training for managers, surveyors and marine professionals.
- Dive support and construction vessel operation.
- Afloat team and individual operator and maintenance training.

## Contact:

**Web:** [www.c-mar.com/dp-training.asp](http://www.c-mar.com/dp-training.asp)

**Email:** [courses@thedpcentre.com](mailto:courses@thedpcentre.com)





## Introduction

C-MAR Teleinformatics are a subsidiary of the C-MAR Group and were founded in 1999.

C-MAR Teleinformatics supply unrivalled ICT products, services and support packages internationally. We are committed to dedicating time and expertise to create the best ICT fit for each and every one of our clients, using the latest in technological solutions.

Our main areas of expertise are:

## Consultancy

To create that perfect fit, we assign companies with their own multi-disciplined consultant who will work closely with your organisation to develop the right ICT strategies for you. This can cover Business and Strategic ICT Management, Business Performance Improvement, Business Application Selection and Support, IT Architecture, Sourcing, Procurement & Services Management and much more.

## Networking & Security

Loss of client data or strategic business plans can harm credibility, threaten customer loyalty and even have a direct effect on profitability. We come to the rescue with a complete range of advanced networking and security options. Networking and Security Services include Virtualisation, Network Consulting, Integration and Deployment services, Security and Privacy Consulting services, Managed IT Security services, Business Continuity services, Auditing and Monitoring tools, Firewall Design, Testing, Implementation and Management services.

## Server Based Computing

We know that ICT can be a big investment. It's because of this that we want to make sure you make the most of your technological investments. We have long-established partnerships with respected and trusted vendors including Cisco, Citrix and Novell to bring complex server based solutions to you and your business.

Our years of experience in this area are a massive advantage. At the drop of a hat we can enable instant information sharing from a variety of sources to employees, partners and vendors within a secure web environment – all from any device, connection or location throughout the globe.

## Telecommunications

C-MAR Teleinformatics provide IP Telephone Systems that use the internet to greatly reduce your telephone bills, not to mention give you some added extras like instant contact, home-working, toll-free remote offices and email integration.

Video Conferencing is provided to bring your remote offices closer to you. This can save on travel costs and allows instant access to colleagues where ever they are.

C-MAR Teleinformatics are also a Mobile Phone reseller offering services from some of the largest providers such as Vodafone, O2 and Orange.

VSAT communications are a part of modern communications in the marine and offshore sectors and C-MAR Teleinformatics have experience in interfacing terrestrial and marine or offshore networks over VSAT links.

## Helpdesk & Support solutions

As an extension to your IT resources, we run a help desk and support solutions service. We differ from our competitors as we let you select a level of support appropriate to your organisation's operational needs, helping you to save a pretty penny on direct and indirect costs. From help desk incident telephone support to permanent on-site staff, our staff have the skills and scope to manage your IT solutions, leaving you to relax and concentrate on that report you've been meaning to do.

Our support solutions include Helpdesk services, including Banked Hours, On-site Support, Infrastructure services, Technology Lifecycle Management, IT Outsourcing services and Business Applications support.

# Marine and Energy Sector Business Solutions



## Solutions

The shipping and offshore markets are renowned for their advanced and changing requirements. C-MAR Teleinformatics, as agents for Onsoft Computer Systems AS (OCS), bring you niche software solutions to help you meet these challenging needs.

OCS software is developed in close cooperation with users and their combined best practices have been built into the solutions.

OCS software covers three main areas:

### OCS HR

OCS HR is an integrated suite of software modules supporting core HR processes such as Crew Planning, Competence Management, Career Planning, Travel Management, Training, Administration and Multinational Payroll. Web-based self-service applications provide users throughout the organisation with access to tools, allowing them to play a more active role in the HR processes.

A replicated onboard solution exists, containing modules for crewing, masters' accounts, payroll, slop chest, etc.

### OCS MM

OCS MM, commonly known as Maisy, is an ERP solution for Managing Assets, Spares, Procurement, Invoicing, Rentals, Maintenance and Materials Movements. The solution is flexible and advanced, enabling customers to optimise their internal business processes whilst sharing information across the organisation anywhere in the world. Most Maisy customers operate in the offshore segment, but the flexibility of the solution also makes Maisy suitable for other industries in which Asset Management is a key objective.

## OCS PreMasterPRO

PreMasterPRO is a ship management solution. It offers a broad range of tools optimised for marine Maintenance, Spares and Procurement administration according to class, governmental or contractual requirements. Numerous reports exist including ISM, Quality, Maintenance, Inventory, Procurement and Risk Management.

Document administration and flow control, specifically designed for ship owners and managers, is integrated into the solution.

## Services

C-MAR Teleinformatics, as agents for Onsoft Computer Systems AS, will deliver your solution to the user's desktop no matter where they are in the world. C-MAR Teleinformatics offer a wide range of services designed to ensure the successful implementation of all OCS products. These services include training, project management, infrastructure design, best practice consulting, data migration, support and help desk services.

Our consultants are professionals with broad experience from the shipping and offshore industry, and possess extensive knowledge within these areas.

## References

OCS solutions are used by over 200 companies in more than 35 countries worldwide. This includes major international shipping and offshore companies.





## Where to find us

### **CMAR UK**

C-MAR Group, 14 Regent Quay, Aberdeen, Scotland, UK, AB11 5AE  
T: +44 (0) 1224 352000 F: +44 (0) 1224 583009  
E: aberdeen@c-mar.com

### **C-MAR TRAINING – LONDON**

The Dynamic Positioning Centre, 37 Shad Thames,  
London, England, SE1 2NJ  
T: +44 (0) 207 407 3131 F: +44 (0) 207 357 9621  
E: london@c-mar.com

### **C-MAR CONSULTANTS – LONDON**

HQS Wellington, Temple Stairs, Victoria Embankment,  
London, WC2R 2PN  
T: +44 (0) 20 7632 9090 F: +44 (0) 20 7240 2734  
E: surveys@c-mar.com

### **C-MAR AMERICA**

1111 Katy Freeway, Suite 100, Houston, TX 77079, USA  
T: +1 281 556 1115 F: +1 281 556 1141 E: houston@c-mar.com

### **C-MAR AMERICA**

107 Global Circle, Suite 202, Lafayette, Louisiana, 70503, USA  
T: +1 337 406 2864, F: +1 337 406 2866, E: lafayette@c-mar.com

### **C-MAR CANADA**

664B Water Street, Summerside, Prince Edward Island, Canada, C1N 4J1  
T: +1 902 888 3062 F: +1 902 436 6490 E: canada@c-mar.com

### **C-MAR LTD**

2nd Floor Annex Building, C Le Masurier House, La Rue Le Masurier,  
St. Saviour, Jersey, JE2 4YE  
T: +44 (0)1534 731734 E: jersey@c-mar.com

### **C-MAR BRAZIL**

Avenida Rui Barbosa, 1860 Sala 101, Alto Cajueiros, Macae,  
Rio de Janeiro, Brazil, CEP 27915-012  
T: +55 222 772 2663 T: +55 222 763 9253  
F: +55 022 2773 4548 E: brazil@c-mar.com

### **C-MAR INDIA**

The Dynamic Positioning Centre, 501 Delphi 'A' Wing,  
Orchard Avenue, Hiranandani Avenue, Hiranandani Business Park,  
Powai, Mumbai, 400076  
T: +91 22 6510 4700 F: +91 22 6510 4701 E: india@c-mar.com

### **C-MAR ASIA**

5 International Business Park, #02-02, Mewah Building, Singapore, 609914  
T: +65 6318 4950 F: +65 6318 4951 E: singapore@c-mar.com

### **C-MAR CROATIA**

Branimirova Obala 16, 21 000 Split, Croatia  
T: +385 (0) 21 380 322 E: croatia@thedpcentre.com

### **C-MAR MIDDLE EAST**

309, Dubai Real Estate Centre, Al Mina Road, Dubai, P O Box 71602  
T: +971 4345 0755 F: +971 4345 2263 E: surveys@c-mar.com



**C-MAR**  
GROUP



● C-MAR Offices