Marine Facilities Planning

Marine facilities Planning System Overview

The Marine Facilities Planning system (MFP) is a software platform developed in collaboration between two leading marine science ship operators and technical support organisations, the NERC and the NIOZ. The platform is designed to manage and integrate the key aspects of equipment asset management and programming; this includes ships, shore based equipment and marine and shore support staff. The system operates to streamline and integrate the process of managing and delivering capabilities to support science programmes and their individual cruises.

The MFP comprises a number of different modules designed to work as an integrated system or used as independent modules. The integrated system can be used as a complete solution for voyage planning, equipment management, staff scheduling, and cruise project delivery. Its modular design can be adjusted to each organisations specific requirements and scope of operation, from large global class fleets to single regional vessels.

The MFP is available for use by other institutions and organisations internationally and we would be pleased to discuss your requirements and interest in accessing the system.

Advantages at a glance

> Modern web based system created by, and for Oceanographic Institutes, ship operators and equipment managers

> Modular structure to cover the broad range of marine facilities planning requirements

> Modules can be used independently or as a fully integrated system

> Tools to Improve the through life management of equipment, maintenance and downtime through integrated equipment scheduling and maintenance planning

> Ensure compliance with customs requirements through professional planning and secure equipment tracking

> Enables staff and equipment resource planning through the use of real time availability of data

> Extensive reporting functions

> Mobile support through dedicated iOS and Android apps

Scientist Portal

The scientist portal is the dedicated module for registered scientists where applications for ship time and equipment can be created and managed. Scientists can request an account through a simple online registration process, allowing the scientist to complete online applications for access to ships and equipment. When a new application is created an individual workflow will be generated with a unique identifier. The workflow identifies a series of steps and responsibilities that will guide the scientist through the process from application stage to post-cruise reporting.

Voyage Planning Tool (VPT)

The VPT is able to create multiple draft programs in parallel covering the same time period using the applications created in the scientist portal. This enables programme managers to create and test different programme options until the final programme is agreed. A voyage within the programme can be created by adding mobilisation, demobilization or mid cruise port calls during the voyage. Cruise applications created in the science portal can be added to this voyage using a drag and drop function. Cruises or other activities within the programme can be specified as 'Science', 'Charter' 'barter', 'trials', 'Refit' etc. When the programming manager decides on a final draft programme, the draft can be published for viewing which then triggers the other integrated modules to support the detailed planning and delivery of the programme.

Inventory Management

The inventory management module enables users to create and maintain detailed records on all equipment assets. The inventory management module is integrated across the system coordinating tasks, procedures, suppliers, inventory, purchases, budgets, scheduled and unscheduled maintenance, calibrations and certifications.

The system enables you to know exactly where your equipment is, where it has been, where it will be and if it is fit to use.

Project Management

When a scientist sets up a new application, the application with its unique identifier is visible in a project management module which shows an overview of all applications in the system. The project management module shows the current stage of the application in the planning and delivery process. The administrator can appoint specific roles to users for the various steps in the project workflow. When a step is completed the status of the step changes to finished, and the next steps in the project will now be active. When the cruise application is added to the cruise program, deadlines and dates will be generated automatically for certain further steps in the workflow, these deadlines and action dates can be specified by the individual organisations to fit their specific requirements.

Personnel Planning Module:

The technician and ship's crew planning module is a scheduling module allowing managers to allocate and schedule crew and technicians onto cruises within a programme. This can be done both at the early draft programme and published programme stages.

A database of staff can be set up within the system, organised by department or discipline, individual staff can then be allocated to cruises.

The system displays the staff within the programme timeline identifying the period between deployments as well as displaying the 'days at sea' helping managers to ensure staff are programmed within their contractual requirements. The system allows managers to report on a range of staff deployment metrics. The module allows individual staff to see their allocated sea time on an individual 'my schedule' tab.

Mooring Construction module

This integrated module is designed to construct mooring systems from equipment (segments) within the system, assembling the various components of the mooring into a complete 'mooring design'. Segments such as wires/cables, buoyancy, instruments, sensors, anchors and releases can be constructed within the system. Further details of the mooring design are then able to be added for configuration of the mooring diagrams.

Task & Notification Centre

The integrated task & notification function provides automated email alerts on planned departure and arrival of ships, equipment transports, and equipment maintenance and management tasks. It is flexible and configurable, and is designed to be specific to the particular organisations management and delivery tasks defined in the systems workflow.
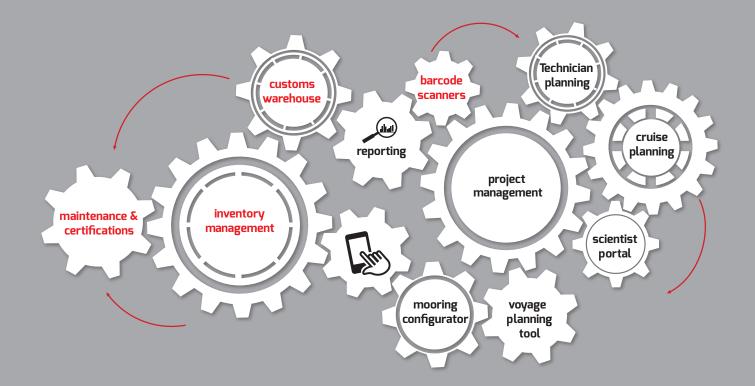
Mobile access via phone apps

The MFP has a mobile phone app' which allows users to see the current fleet position on a map; by tapping on the ship icon on the map display the current cruise information can be accessed to view operational and equipment details.

The app' allows users to view current equipment located on board ships together with 'in sea deployments'.

The app' also operates as a mobile bar code scanner device for scanning equipment within the MFP inventory management database. The scanner can be used as a convenient tool at sea and ashore to identify and access equipment details.

Join us >

The diagram shows interconnected gears labeled: customs warehouse, barcode scanners, Technician planning, cruise planning, reporting, project management, maintenance & certifications, inventory management, scientist portal, mooring configurator, voyage planning tool.

Ongoing service and support

- Continuing Development
- Professional Helpdesk
- Dedicated service team
- Active User Community to share best practices

HOSTING SERVICES MFP

The system can be installed on your local server but is also available as a hosted solution. We take care of everything behind the scenes: software installation, software updates and the secure storage of your database. Your transactions and data are fully secure because we use Secure Sockets Layer protocol (SSL) to facilitate encrypted data exchanges and state-of-the-art data centers which hold all required certification.

> How do I join the MFP software?

The MFP is a flexible modular system able to be customized for each individual organisation. The 'out the box' system is customized for each organisation, complete with logos and website subdomain. All your user groups, activities, codes and management structure are incorporated into the system. After you invite users to join they can edit their Profiles. With different user rights, you can be sure that sensitive information isn't being misused or adjusted incorrectly.