



Direction technique Eau, mer et fleuves

Case Study

McMurdo Supports French e-Navigation Strategy.

McMurdo Group supplies Aids to Navigation Remote Monitoring System to support Cerema's national strategy to enhance mariner's services around the French coast.



Client Overview

The Centre for Studies and Expertise on Risks, Environment, Mobility, and Urban and Country Planning (Cerema) is a French public body that supports the national and local authorities in the field of sustainable development. Cerema's Technical Division DtecEMF focus on developing, disseminating and promoting best practice techniques and know-how in relation to port, river and coastal engineering, safety of navigation and telecommunications for Water, Sea and Waterways.

Organisational Challenge

DtecEMF seeks technical and technological innovation that allows constant improvements in maritime security of French waters in compliance with IMO resolutions and IALA recommendations. The DtecEMF requirement for an e-Navigation solution allows it to effectively support its remit of developing a strategy to support the future security challenges of maritime transport while ensuring the environment is protected.

www.mcmurdogroup.com



McMurdo Group – The industry's first end-to-end life-saving and tracking solutions provider
Distress Beacons • Satellite Connectivity Infrastructure • Monitoring/Positioning Software • Emergency Response Management



The McMurdo Solution

The McMurdo Marine solution is based on the AIS standard, in particular the functionalities provided by the Application Specific Message for AtoN's monitoring data (addressed message type 6, DAC/FI = 235/10, registrant UK Trinity House). The system incorporates KANAtON3 AIS transponders that provide remote monitoring and control of AtoN's via VHF, while the acquisition of the operating parameters and the application of the remote monitoring and control are performed via a COMAtON interface board.

McMurdo Marine has created an innovative low-cost design of AIS base stations (transmission/reception stations) to support the network of shore stations that act as an interface between the shore and the sea. The use of the AIS technology for remote monitoring and control of AtoN's also allows significant costs savings compared to traditional GSM solutions through the reduction of additional communication costs.

The solution also includes the VigieAton 2SCADA supervisory control and data acquisition software, which offers a reliable customised solution to improve situational awareness and reduce AtoN's maintenance via a web-based application that receive the AIS messages relayed ashore.

Key Solution benefits

This system enhances safety and efficiency of navigation by providing a range of features including:

- Real Time Interactive display map highlighting AtoN locations
- AtoN status messaging and management, diagnose the damage and malfunctions and, if necessary, put emergency equipment into operation.
- Remote control of switching on/off devices installed on the AtoN's
- Processing of meteorological, hydrological and technical data
- Automatic Position alerts and monitoring
- Ship displays in AtoN zone
- A server based web-service application that will receive the AIS messages collected on shore.

Why McMurdo

DtecEMF has been working with McMurdo Marine Solutions since 2009 in the development of AIS AtoN for deployment around the French coast based on McMurdo's decade of experience in designing and manufacturing electronic aids to navigation (AtoN's).

McMurdo Marine solution was selected to support its' e-navigation strategy because of the comprehensive efficiency impact on the AtoN network and McMurdo's extensive experience of embarked systems that allows the development of AIS solutions satisfying the specific requirements of AtoN's, particularly in terms of power consumption, sealing, robustness, easy installation, reliability and flexibility of the associated applications.

McMurdo Marine Solutions Overview

Part of the McMurdo Group which combines proven brands Boatracs, Kannad, McMurdo and Techno-Sciences, Inc. into the industry's first, single-vendor provider of end-to-end life-saving and tracking solutions including distress beacons, satellite connectivity infrastructure, monitoring/positioning software and emergency response management.

McMurdo Marine Solutions offer highly versatile capabilities in the delivery of precise, customised tracking, vessel monitoring solutions, Fleet Management and Aids to Navigation to a broad range of customers, ranging from governmental agencies, fleet owners and via bespoke OEM partnerships.



info@mcmurdogroup.com

www.mcmurdogroup.com