

Proactive protection of offshore structures - and timely responses to potential threats



Given the potential for environmental catastrophes and collateral damage, maritime and offshore safety is of paramount importance. Historically, surveillance of offshore vessel traffic in areas surrounding oil fields and gas rigs has been done with various solutions that are considerably limited in comparison to the widely deployed AIS (Automatic Identification System). This AIS-based solution from GateHouse Maritime provides the means to monitor and communicate with vessels in specified areas of open water as well as providing visibility with regard to the movements of supply vessels.

The enhanced visibility and communication options provide effective and actionable intelligence on any movements in proximity to your offshore structures - enabling you to, for example, act proactively in regards to potential threats.



Figure 1. A WatchDog is set up (the blue area) to send alerts when a ship enters the area. A message can be sent to the ship either automatically or manually.

Benefits

Timely response to potential threats

Enhanced visibility and early warnings of potential threats to the field and field assets allows operators to protect the structures and avoid expensive down time caused by collisions with platforms or infrastructure.

Identify and document perpetrators

All activity in the defined surveillance zones is logged which provides the best possible evidence for correlating the occurrence of damages with identifiable vessels.

Situational awareness without information overload

Features such as alerts (WatchDogs) and custom colouring of vessels on the graphical display system ensure that operators are not overloaded by irrelevant information. This enable them to concentrate on other tasks, such as monitoring other systems without unnecessary interruption.

Preventive inspection, maintenance and security

Advanced statistical analysis of traffic patterns in and around a platform enables continuous risk assessment and better marking of the platform and its assets. Traffic pattern analysis, traffic density plots, event type frequencies and locations provide direct decision support for preventive measures, such as virtual AtoNs.

Features

Ship information

When the user clicks on a target (e.g. an AIS equipped ship, base station, virtual area, etc.) on the map, information about the target is displayed in the information window.

All ship information can be displayed as labels on the map, attached to each ship. Historical tracks and projected heading can also be displayed for selected ships.

WatchDogs

- The WatchDog feature is used to analyse the AIS data stream and generate alerts in case of a user-defined events, e.g.:
- The Region WatchDog will monitor vessel traffic within a specified area. The WatchDog is activated when a vessel enters the area and deactivated when it leaves the area.
- The Passage Line WatchDog will monitor a specified passage line for vessel crossings.
- CPA WatchDog: The Closest Point of Approach/Time to Closest Point of Approach WatchDog can be set up to trigger alarms if a ship gets too close to a fixed structure.
- WatchDog event notification: WatchDogs can be set up to detect important events (such as: near-miss, collision course or if vessel enter/exit an area) and to notify users via e-mail or SMS.

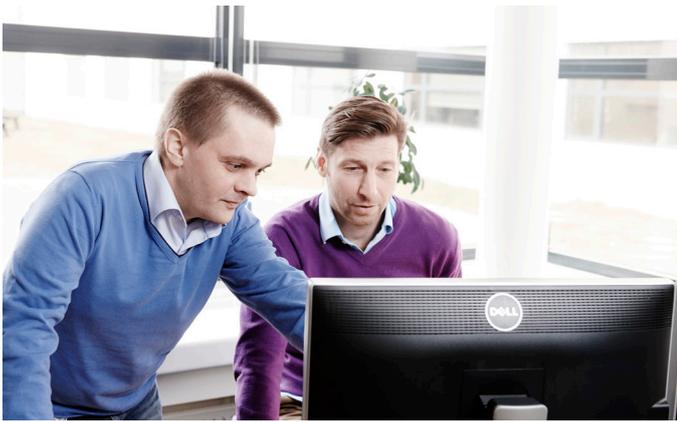


Figure 2. GateHouse Maritime offers various degrees of support and maintenance depending on individual customer requirements.

Mouse position and measurement tool

Latitude and longitude of mouse pointer are shown. Measurements can be done on the displayed map and distances will be displayed in nautical miles.

Replay mode

This allows the user to switch between Online mode and Replay mode. Replay mode allows the user to display old AIS data stored in the database. Online mode shows data as they are received from ships.

Other Supported Target Types

Radar targets using TTM messages can be displayed and a simple fusion of AIS and Radar targets is available.

Technical description

The ghMaritime Offshore Oil & Gas Rigs solution is based on our widely used and field proven AIS software - implemented by coast guards and maritime administrations worldwide. The solution includes a web-based display for operators and an event notification server hosted by GateHouse Maritime.

Training

GateHouse Maritime provides an online two-day training session where operators and administrators receive hands-on training in operating the solution for optimal utilization. The training session is included in the price of the solution.

Support & Maintenance

GateHouse Maritime offers 24/7 support and maintenance, which can be purchased in addition to the solution.

Request for price or more information

Please, contact us at maritime@gatehouse.dk for further information.