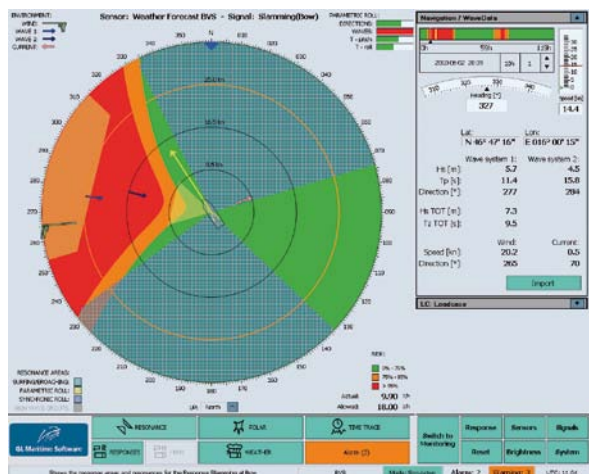# GL Maritime Software

GL SeaScout

Optimising routing decisions

The challenges of optimal vessel routing

Optimal ship routing is understood to entail reducing voyage costs while maintaining safe passage. However, seaway and weather conditions can pose variables that require modification of the initially planned route. You want to ensure that the navigating officers onboard have high-quality information available on exactly how the ship is responding to prevailing conditions and what dangers of extreme ship movements exist. You want to be sure that navigational decisions taken onboard will optimize safety of vessel, cargo, and crew while maintaining schedule integrity.

Resonance diagram:
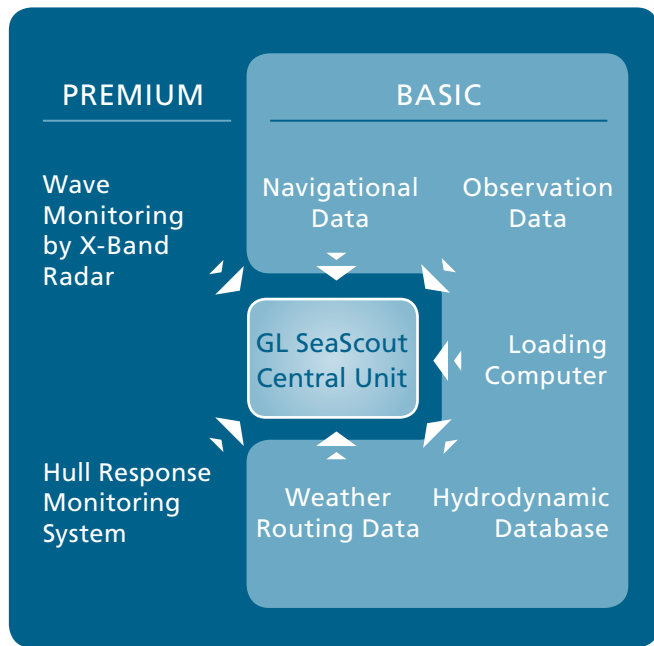Display of the warning zones depending on speed and course

The solution you need

GL SeaScout is an integrated onboard system that provides ship officers with decision-making support. It is suitable for any kind of vessel, and is a particularly sensible solution for containerships, MPVs, passenger ships, heavy lift vessels, bulk carriers or tankers.

GL SeaScout combines advanced computations with seaway measurements, wave/weather forecasts, navigational data, and other data such as loading condition and an advanced vessel-specific hydronamic database, computed at GL. The system informs ship officers of how the ship is responding to current conditions with respect to pre-defined alarm levels for movements such as slamming, rolling, pitching, or bending moment. It also provides navigators with a tool to determine optimal speed and course to minimize or avoid dangers and risk to vessel, cargo and crew.

- ⇨ Monitoring of acceleration / ship movements
- ⇨ Monitoring of current ship's responses according to pre-defined alarm levels
- ⇨ Warnings and alarms when critical values are approached or exceeded
- ⇨ Simulation mode for determining best speed and course to minimize risk
- ⇨ Logging of voyage data for subsequent analysis
- ⇨ User-friendly: variable display for day, dusk and night; touch screen interface

GL SeaScout is available in two versions: GL SeaScout – Basic uses the seaway forecasts from the weather routing provider. The Premium version additionally measures the seaway from onboard ship by means of nautical X-band radar and can also include data from a Hull Response Monitoring System.

For an optimal routing GL SeaScout Central Unit requires information from different systems onboard

GL your best partner

GL Maritime Software is the software provider and system integrator for the maritime industry. We improve our clients' processes and decisions in ship operations and fleet management, both onboard and onshore. We develop market-leading software products, provide implementation and integration services, training and technical and software support. With decades of experience and stability we offer you the highest investment security in the industry.

Our continuous efforts in research and development provide you with the latest functionality and technology to improve your competitiveness. We are experts not only in software development and support, but in key fields such as maintenance and efficient ship operations.

Our maritime market focus affords you the highest level of usability and simplicity to ease implementation and deployment. We are one of the few truly independent software providers in the industry, not financially backed by another shipping company.

How you benefit

- Enhanced schedule integrity: Avoid costly delays

- Increased ship safety: Support your crew in navigating more safely in extreme weather conditions, e.g. by avoiding rolling and slamming

- Cost savings: If the risk of damage to the ship, cargo and environment as well as injuries to the crew is reduced, your operational costs will be lower, e.g. through reduced down-times and repair costs, fewer claims and, possibly, lower insurance rates

- Reduced ship motion: This results in more comfortable voyages for passengers and crew and lowers the risk of cargo damage

- Quantifiable performance: By monitoring hull stresses and loads, it is possible to evaluate a ship's lifecycle performance

Full Service and Support

- GL Maritime Software offers comprehensive service and support to maximize your benefit.

- Comprehensive pre-installation support

- Onboard installation of a customised system with no interruption to a ship's operation

- Evaluation and verification of results during a 12-month validation period

- Training version to prepare crew for handling GL SeaScout and simulating a ship's response to adverse seaways

- Training and support during installation and commissioning

- Onboard system maintenance (on request)

One-stop shopping at GL	GL SeaScout offers synergies and integration to other GL Services and Products:
Ship Operations Software: GL HullManager , GL FleetAnalyzer, GL CrewManager, GL ShipManager	**Consulting:** Support in the design and implementation of innovative maintenance concepts.
Ship Navigation Support: ECO-Assistant	**Certification:** IMO, ILO, ISM, ISO, ISPS among others

GL