



Enhanced Monitoring



BENEFITS:

- Fewer groundings
- Fewer collisions

With Enhanced Monitoring a ship can share its route with a shore centre and receive alerts if it deviates from its route, reducing the risk for groundings by 50%.

The shore centres can monitor that ships are following their planned route and also foresee possible dangerous situations and suggest route modifications (geographic and/or speed) due to traffic or other impeding conditions reducing the risk of collisions.

“Sea Traffic Management is the biggest thing that has happened for Vessel Traffic Service since AIS”

Anders Johansson,
VTS-operator Gothenburg



Port Call Synchronisation and Optimisation



BENEFITS:

- Shorter turn-around time
- Bunker and emission reduction
- Optimized use of resources

With Port Call Synchronisation and Optimisation ships and ports exchange time stamps for arrival and departures, in order for all parties to perform actions just-in-time and create more efficient port calls reducing waiting time outside ports and allowing green steaming between ports.

By sharing updated information in real time the port actors increase predictability not only for the arrivals and departures of ships, but just-in-time operations all through the port call and further on with hinterland transportation leading to optimised turn-around processes.

“An important step for the whole maritime transport chain. To allow this to happen, compatibility is key. It’s imperative that the maritime industry uses existing, open industry standards, agreed upon by first hand stakeholders.”

Ben van Scherpenzeel, chair of the international Task Force for Port Call Optimisation



Baltic Navigational Warnings



BENEFITS:

- Avoiding human errors
- Reduced workload

Today’s navigational warnings are sent by Navtex and personnel on-board have to manually transfer it to the charts if relevant to the area they are in.

With the Baltic Navigational Warning Service, navigational warnings are sent directly to the on-board electronic chart (ECDIS), machine to machine.

The service allows warnings to be sent only to those affected and deleted when no longer relevant, thereby offering greater accuracy, relevance and less administrative burden leading to increased safety.



Importing Pilot Routes



BENEFITS:

- Common situational awareness
- Reduced workload

Before leaving a port, a ship has to plan the route berth-to-berth. By importing the correct pilot routes at both ends into the original plan, misunderstandings are eliminated and no re-planning is needed at a later stage.

The service also allow bridge officers and pilots to have a shared mental model of the route during the piloting stages of the voyage.

“Having the correct pilot route in ECDIS provides a common understanding reducing the risk of misunderstanding”

Håkan Heurlin,
Swedish pilot



Route Optimisation



BENEFITS:

Bunker reduction

Reduction of emission

The standardised route format opens up the optimisation service market for all ships.

The Sea Traffic Management concept will provide the means to get the ships' route optimised by different service providers with various focuses such as the weather, ocean currents, fuel consumption, no-go areas regarding draft or sensitive nature, conflicts with other ships routes etc. With Sea Traffic Management Route Optimisation is interoperable between different systems, reducing manual work when routes can be accepted directly in ECDIS.

"This opens up for effective route optimisation generally, and especially in coastal waters."

Katarina Andersson,
Sales & Product Manager, SMHI



Ship to Ship Route Exchange



BENEFITS:

Increased common situational awareness

Ship to ship route exchange allow ships to share their intentions with other ships in the vicinity giving all involved actors a better overview of the traffic situation.

The route exchange will introduce a new tool which helps the Officer On Watch to plan ahead, foresee possible dangerous situations and reduce route detours due to traffic conditions.

"Stena Line would have avoided several incidents and at least one accident."

Jörgen Lorén, Safety Manager

A NEW PARADIGM FOR MARITIME INFORMATION SHARING

90% of world trade is transported by sea. Every day, all year around, tens of thousands of ships operate the oceans struggling from lack of updated information and a common situational awareness. This leads to risks of accidents, sub-optimal routes, waiting times in ports and a larger ecological footprint than necessary. As shipping now enters the digital age, time is right for change.

Sea Traffic Management (STM) connects and updates the maritime world in real time, with efficient information exchange. Through data exchange among selected parties such as ships, service providers and port actors, STM is creating a new paradigm for maritime information sharing offering tomorrow's digital infrastructure for shipping.

STM services allow personnel on-board, and on shore, to make decisions based on real-time information. The services enable more just-in-time arrivals, right steaming, reduced administrative burden and decreased risk related to human factors.

The vision of STM is to create a safer, more efficient and environmentally friendly maritime sector. The goals set for STM fully deployed by year 2030 (in relation to year 2015) are the following;

- Safety: 50% reduction of accidents.
- Efficiency: 10% reduction in voyage costs and 30% reduction in waiting time for berthing.
- Environment: 7% lower fuel consumption and 7% lower greenhouse gas emissions.



Sea Traffic Management Services

The next step for a safer, more efficient and environmentally friendly maritime sector.



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