As our industry faces the challenges of globalization and increasing scale and utilization of vessels, we must continuously look for ways to improve efficiencies. Shipping companies and port operators must look for smarter ways to deliver against increasing expectations.

Trelleborg believes that the challenges at the port and vessel interface demand a common platform for communication and data sharing, with shared standards and processes.

**The Critical Port and Vessel Interface**

The port and vessel interface is the set of critical events from vessel approach, through to docking and mooring, on and offloading, and the final vessel departure. Its multiple operators, considerable complexity and unique position, connecting maritime and hinterland, makes it a critical component of the port.

The consequences of mismanaged processes can be catastrophic. Poor coordination and operational misalignment drain valuable quayside time, reduce throughput and increase the risk of accidents, putting both money and operator safety at risk.

**SmartPort by Trelleborg**

SmartPort is an eco-system of integrated, intelligent assets turning operational data into actionable insights. The platform connects port operations, allowing port operators to analyze performance and improve decision making.

All assets are connected through the SmartPort cloud, which can be accessed by operators using any hand-held device. Information in SmartPort is captured in real-time, in a clear and uniform manner, covering every aspect of the critical events at the port and vessel interface to keep users up-to-date with any activity taking place.
Key Features
REAL-TIME INTERFACE
Through the eco-system of integrated and intelligent assets, SmartPort allows its users to track operations and asset performance in real-time. Information is easily accessed through any desktop or handheld device, providing ports and operators with as much real-time intelligence and line-of-sight as the vessel they are managing into berth.

ENHANCING OPERATIONS
By analyzing the information generated, the SmartPort platform can actively contribute to improving operations. With a complete overview of the assets operating at the port and vessel interface, users can optimize planning and manage operational bottlenecks more effectively. Unnatural events, such as a vessel operating outside of its defined parameters, can be swiftly identified and highlighted using the featured alarm functionality. With SmartPort, there is now complete situational awareness at the port and vessel interface, improving visibility and communication between port owners, operators and pilots.

EVENT LOGGING
All captured SmartPort data is transmitted to the SmartPort cloud, where it can be revisited and assessed retroactively. The platform also allows customizable reports to be created, using both immediate and longer-term data to identify short-term operational efficiencies and enable optimized resource allocation over time.

REMODELING PORT EQUIPMENT MAINTENANCE
SmartPort significantly alters the prospects of preventive maintenance at the port and vessel interface. The platform not only immediately captures and signals any asset malfunctions; it knows the exact time the incident occurred, which vessel was involved and whether this vessel operated within its given parameters. By deriving the root cause of the asset damage, operators can reduce spending on unnecessary or preventable asset replacements.

Operational Benefits
SmartPort helps improve the operational efficiency of the port and vessel interface by:

- Capturing and assessing each individual event at the interface in real-time, keeping users on top of their operations
- Providing a complete overview of interface operations, optimizing planning and asset utilization
- Generating insights in quay wall occupancy, building an understanding of the infrastructure utilization
- Facilitating long-term trend analysis, pinpointing operational bottle-necks to be addressed through future investments
- Preventing accidents using alarm functionalities
- Improving stakeholder communication, avoiding time-consuming paperwork and mistakes due to information asymmetries
- Assessing asset status, facilitating preventative maintenance to optimize quay wall utilization and extend asset life

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