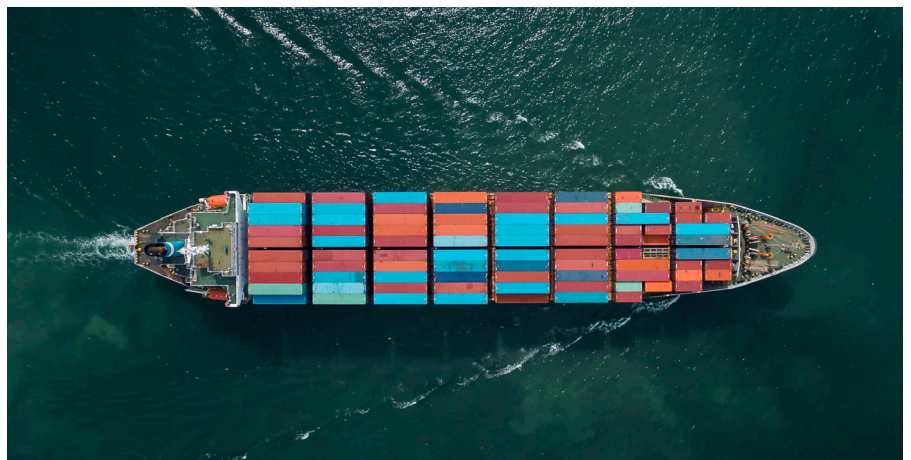# Smart Connected Vessels

IoT Applications & Services

With Smart Connected Vessels from Atos & Siemens, increase fleet performance, profitability and reduce emissions thanks to data-driven decision making.

Find out how we deliver a service that provides value directly to your business.

International shipping operators are under constant pressure to boost competitivity and optimize operations and fuel consumption which, for example, is the largest operational cost component for container shipping. Maritime transport is also a significant source of harmful greenhouse gas emissions such as CO_2, SO_x and NO_x. Large shipping companies are increasingly under pressure to reduce vessel emissions and meet increasingly strict requirements for regulatory compliance that expose operators to potential fines, taxes and harbor fees depending on vessel emissions levels.

Atos and Siemens have developed a managed solution to help shipping companies maximize investments in on-board systems, enable greener shipping and optimize fuel efficiency and maintenance by combining Atos' Codex IoT, AI and Analytics solutions and expertise with Siemens' maritime technology excellence and innovation in the SISHIP EcoMAIN Suite.

Applications

Reduce cost, fuel consumption, emissions and optimize overall vessel performance, by connecting on-board systems and devices already available on the vessel or by adding new devices.

Improve efficiencies on the vessel by providing vessel crews with applications and alerts to:

- Improve engine efficiency and save fuel with Waste-Heat Recovery by knowing the best time to switch the system on or off.
- Maximize the efficiency of the boiler with Optimized Soot Blowing by understanding optimal times to turn on or off the soot blowing system.
- Prevent over lubrication and engine blackouts with Scuffing Prevention that provides insights on when to lubricate the engine.

All three applications are installed on vessels, integrated with the Siemens SISHIP EcoMain Suite decision-management support system and further onboard systems. The vessel captain decides which applications should be activated.

Increase transparency and reporting of performance at headquarters:

- Understand the performance of each vessel with benchmarking that determines how efficiently the solution is being used.
- Simplify regulatory reporting of vessel emissions of dangerous gases, fuel consumption etc.
- Anticipate vessel maintenance and optimize schedules by running remote vessel diagnostics.

Atos is permanently developing new, modular applications for further use cases and enhancing existing learning models to achieve better business results.

SIEMENS energy

Atos

Modular Service Offering

Ensure rapid time-to-value and remove the complexity of running IoT operations on vessel with limited connectivity thanks to an innovative pre-configured and integrated solution and a modular service offering. Designed to ensure your implementation of the solution delivers maximum value to your business, the following services adapt to your requirements and deployment ambitions.

- Solution deployment to vessels
- App development
- App managed service
- Vessel infrastructure managed service
- Vessel managed connectivity
- Private IoT Platform management
- Service orchestration
- Data science services (for example: use case retraining)

Services are organized in three options as follows:

- Targeted Deployment: ensures you obtain the business benefits from the solution and the applications with services and support for a limited number of vessels.
- Broader Deployment: ensures the benefits are being delivered by a large number of vessels.
- Consolidated Cross-Fleet View: in addition to a deployment across the full fleet, provides a consolidated view of operations to management teams on-shore.

Location-Based Service Delivery

To ensure smooth operation of the solution for your vessel crews, Atos delivers services wherever the vessel is located.

Port + Near Shore
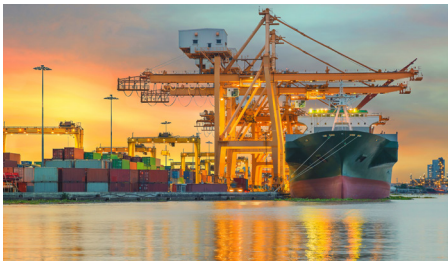**Service Scope:** EcoMAIN*, Apps, Connectivity
Service Activities: Upgrades, Patches, Issue Resolution

High Sea
Service Scope: Support Issue Resolution
Service Activities: Issue Resolutions

Port: Deployments
Service Scope: Onboarding, Landscape, Investigation, Installations, Tools Mngt, Trainings
Service Activities: Deployment Planning, Installation & Setup

HQ
Service Scope: Monitoring, Customer Mngt, Vendor Mngt, Applications Mngt
Service Activities: Upgrades, Patches, Issue Resolution

* EcoMAIN = Siemens SISHIP EcoMain Suite decision-management support system

To simplify implementation and delivery of the solution, Atos takes full responsibility for providing an orchestrated and seamless service by working closely with partners and third parties to reduce complexity so that you can focus on your core business. Managed services are delivered remotely from the Atos IoT Global Delivery Centre in Bangalore, India.

Service Levels

To ensure the solution provides value at scale to your maritime operations, Atos delivers a comprehensive managed service with clear Service Levels based on business-oriented and jointly agreed Key Performance Indicators (KPIs). These are the foundation for our innovative outcome-based commercial model that is designed to ensure that you only pay for the savings and benefits that you receive.

To learn more about the solution or contact an expert, visit atos.net/scv or email rtlmarketing@atos.net