

Wärtsilä Fleet Pilot System



The Wärtsilä Fleet Pilot System allows the collection of data on a ship's substation, which can then be synchronized on a shore based server. The data received are logged and displayed at the remote station located in the customer's offices. The system enables signals received from different vessels of the fleet to be monitored and stored at the same time.

Key Benefits

- Fleet wide persistent data synchronization and logging from ships to shore
- Light and compressed data transfer
- Real-time display (Web App)
- Post cruise analysis (ship specific and fleet-wide)
- Real-time monitoring
- Playback AIS data streaming towards external systems
- Automatic alerts email mechanism
- Radar images transfer (optional, requires an additional application)







Onboard Interfaces

Automation Interface

- Modbus over serial/ethernet link Navigation Interface
- NMEA over serial/ethernet link

Channel List, example:

From Automation

- For Each DG:
 - Engine status
 - Power available& consumption
 - Fuel type
 - Instant. Fuel/Diesel consumption
- Torque
- Fins status
- Trim & List

From Navigation:

- Date & Time
- Ship Position & Speed
- Heading
- Echo-sounder
- Rate of turn
- Wind speed & direction

From AIS:

AIS Targets

System Layout

Shipside

Fleet Pilot Client

Shore side

- Fleet Pilot Server + DB
- Onshore operator station

Transport Layer

 Ad-hoc client/server communication protocol over TCP (ship-shore satellite connection)

System Overview

Main Features

- Real-time* vessel monitoring (* depending on network coverage)
- Trend analysis and comparison
- Interface for DB external access
- Email notify on alert
- Events recovery from DB

Ship System Requirements

- Independent from IAS/NAV family: any standard NMEA/ Modbus serial line can be transferred to shore
- Wärtsilä APSS as a unique point of contact where Platinum technology is installed (IAS & NAV)

Connectivity

 Designed for high latency networks, low bandwidth occupancy: avg. 5Kbit/s for 150 ch. real time sync. – per ship (not including radar images)

- Easy and flexible network configuration (TCP client/server application)
- Out of Band shore DB synchronization provided on integrated DB

GUI

- Platinum look and feel
- Easy to use and flexible in design
- No need for customised software (Web App)

Security

 Ship's serial lines are "read-only": no way to access to IAS/ NAV even in case of intrusion

