
blue|ctrl

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Product company

Ålesund, Norway

Digital Platform X-CONNECT®

17 Years experience

16 Employees

150+ Automation systems


ULSTEIN
ULSTEIN®
SCHOTTEL

Background

Blue CTRL have produced over 100 automation systems based on our old platform.

Situation

Old platform based on Scada, PLC, client server technology, proprietary protocols, hardware and vendor dependent.

Complexity, costly maintenance costs, technical debt, high production costs/ man hour demanding.

Future oriented for Blue CTRL?

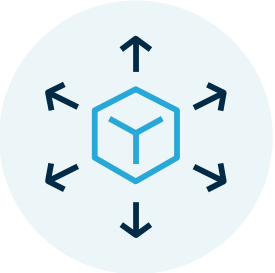
Competitive in market segment?

NO!

Key benefits

Standardized & Configurable

Efficient and professional software handling, cost saving through vessel life time, miminize human errors.



Scalable

All benefits and features of X-CONNECT® available for all vessels and segments.

HW Independent

Secure availablity for HW components, world wide through vessel vessel life time. Increase make independency and competitiveness.

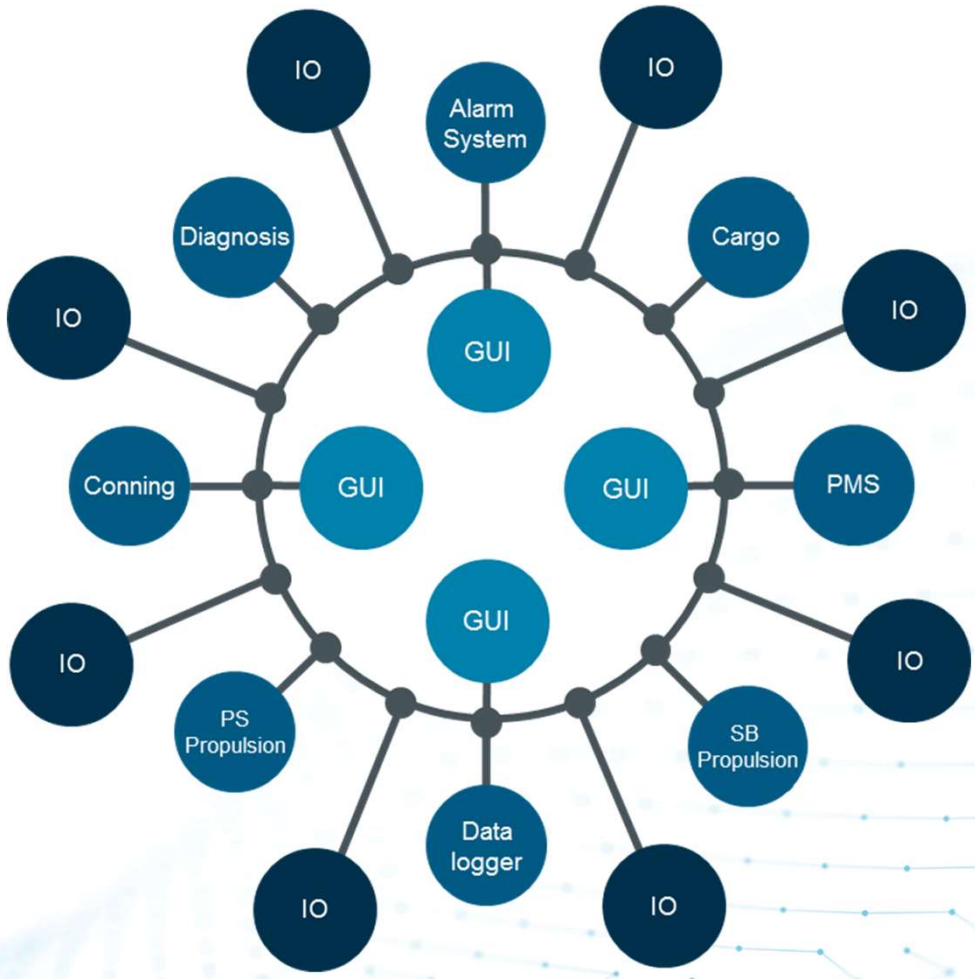
Distributed system

Distributed: X-Connect does not rely on a central service or servers to operate.
(Data for signal trending and historical alarms do rely on a log server)

All data available to all nodes in the system

Segmentation: Essential systems are split into segments to meet class requirements.

Event driven: X-Connect is event driven, so data is only sent on change.



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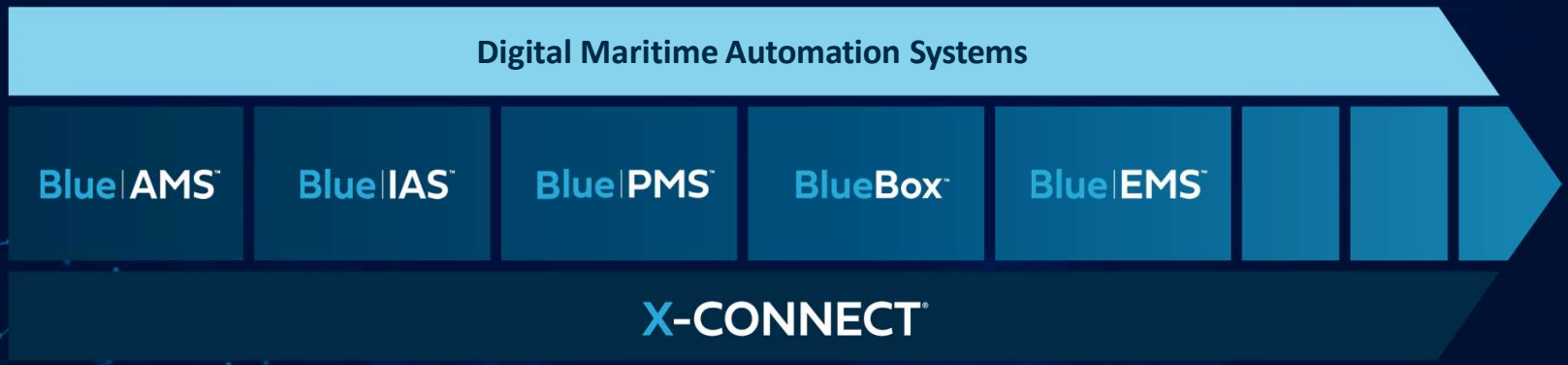
X-CONNECT®

Extremely efficient platform for marine automation, control and monitoring systems.



Awarded GUI

Price-winning interface deisgn.

EXAMPLE VIEWS

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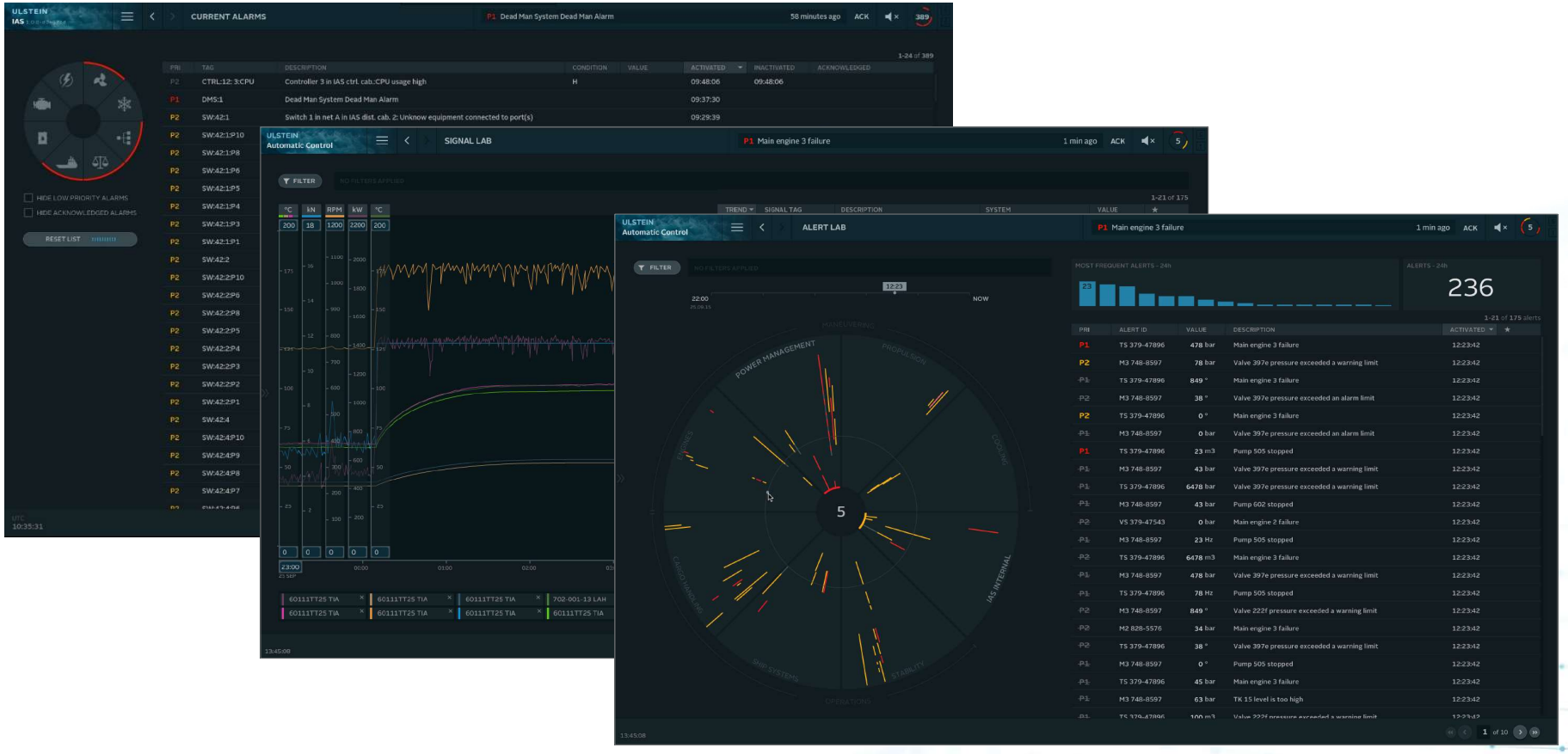

Blue|AMS™

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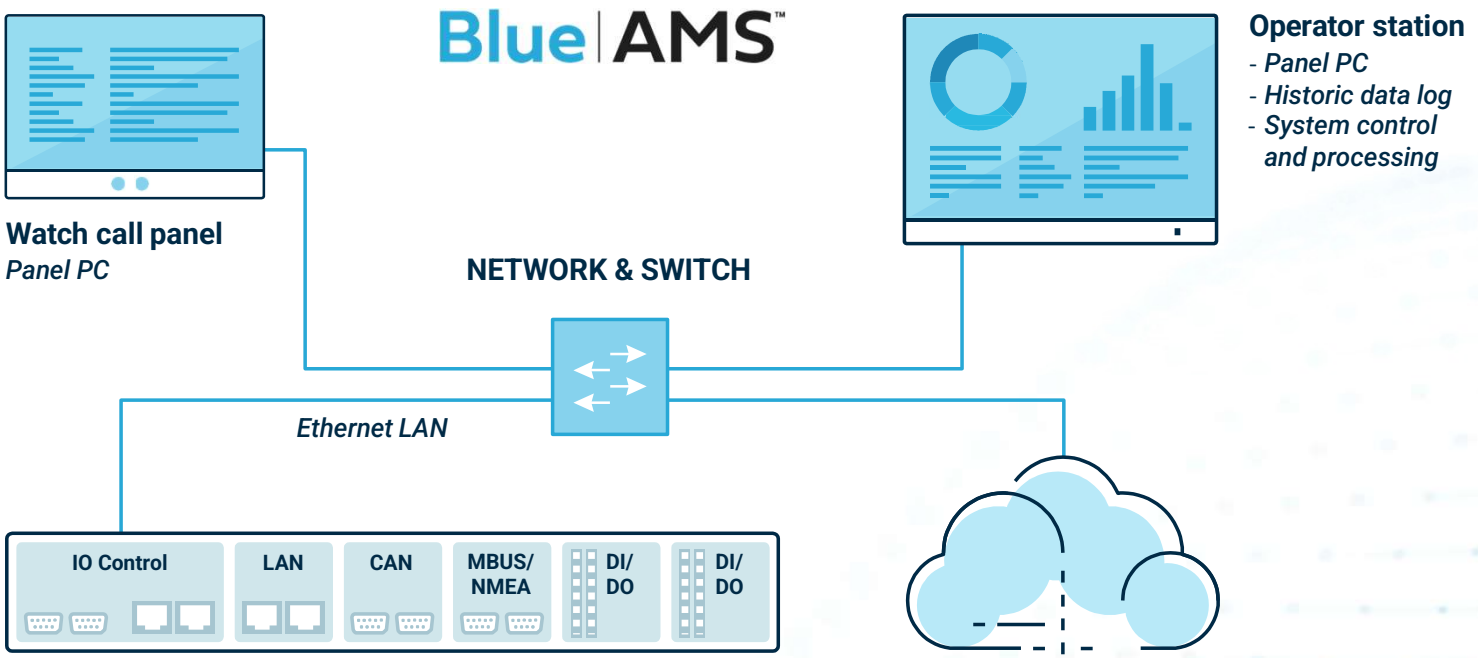
Alarm and Monitoring System based on the X-CONNECT® platform.

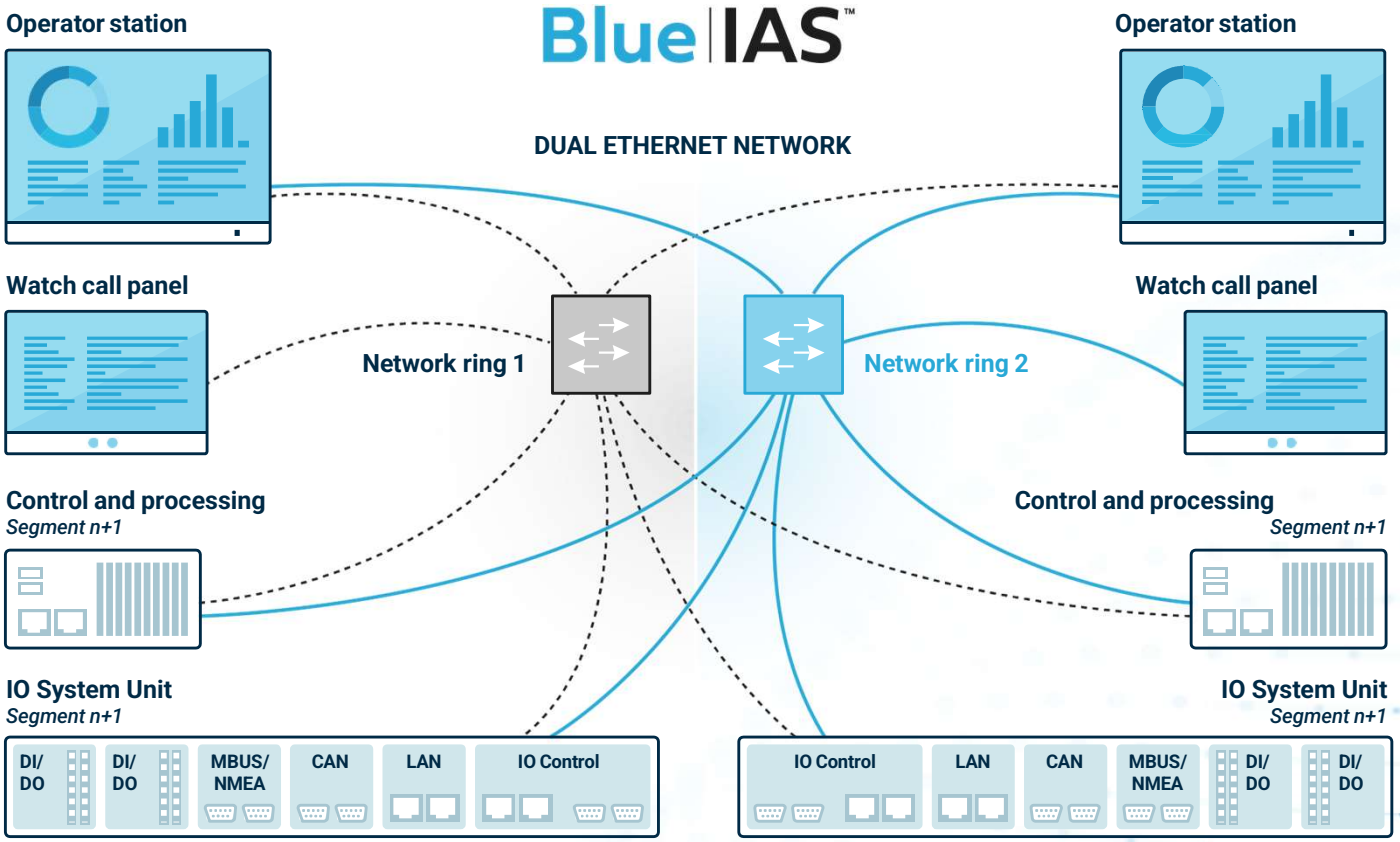
The system makes it possible to monitor various processes and operations onboard a ship.



Blue|IAS™

Integrated Automation System based on the X-CONNECT® platform.

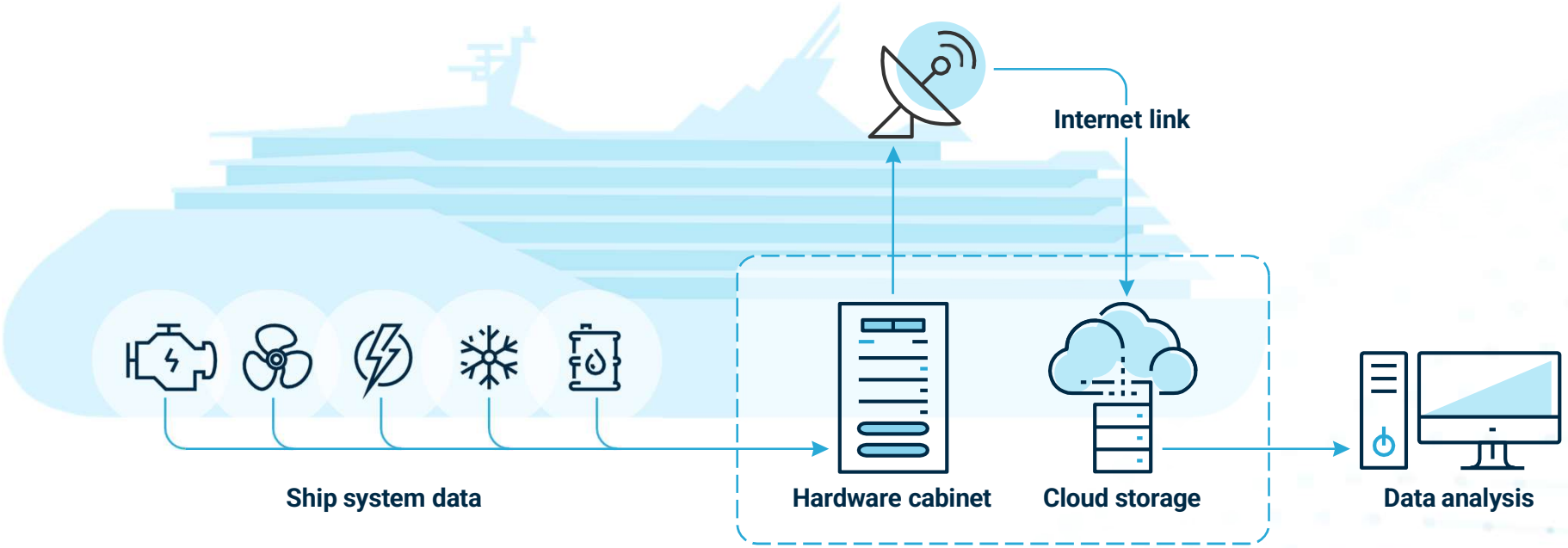
The system makes it possible to monitor various processes and operations onboard a ship.



BlueBox™

Plug in solution based on X-CONNECT® that gives the ship operator direct global access to filtered and unfiltered ship data via a cloud service.

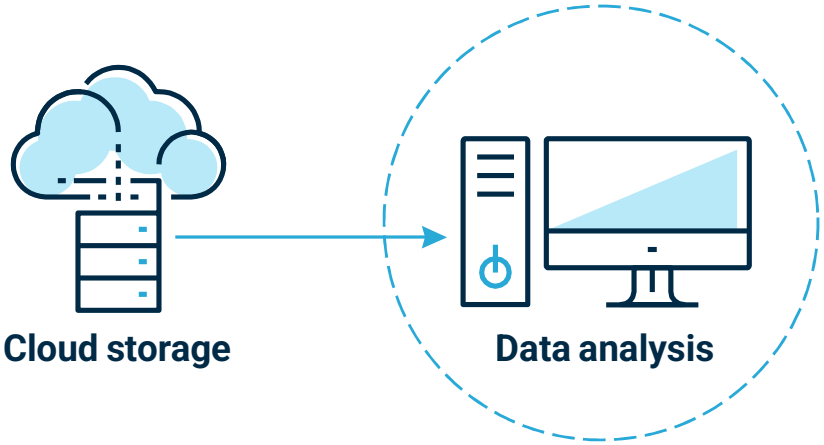
Dashboard solutions for operational analysis, maintenance monitoring, decision support and reporting.



BlueBox™
Scope of delivery

Blue Dashboard

Collecting data from cloud for monitoring, process & analyzing.



Availability

Diagnostics

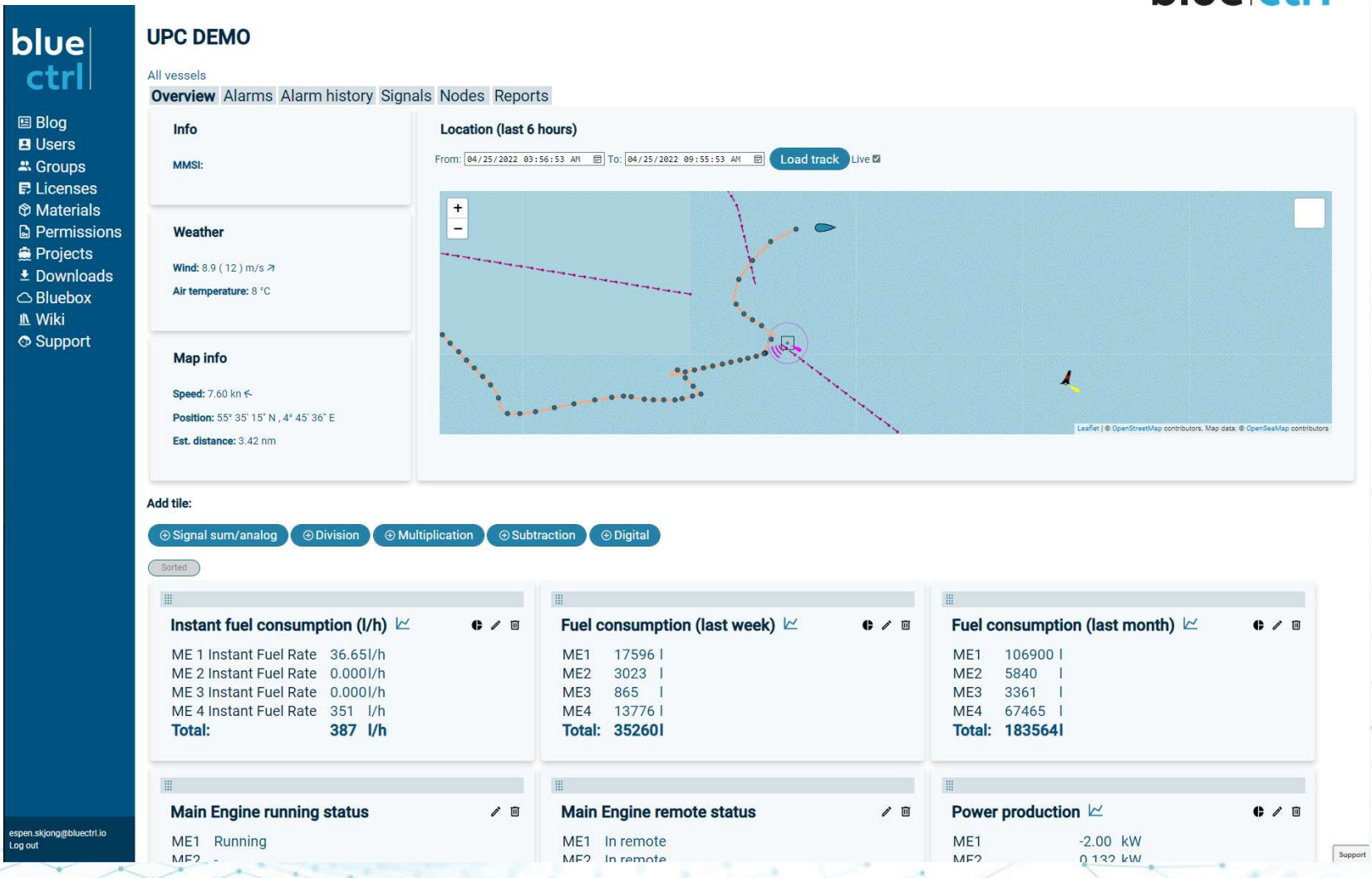
Vessel Performance

User Adaptable KPI's

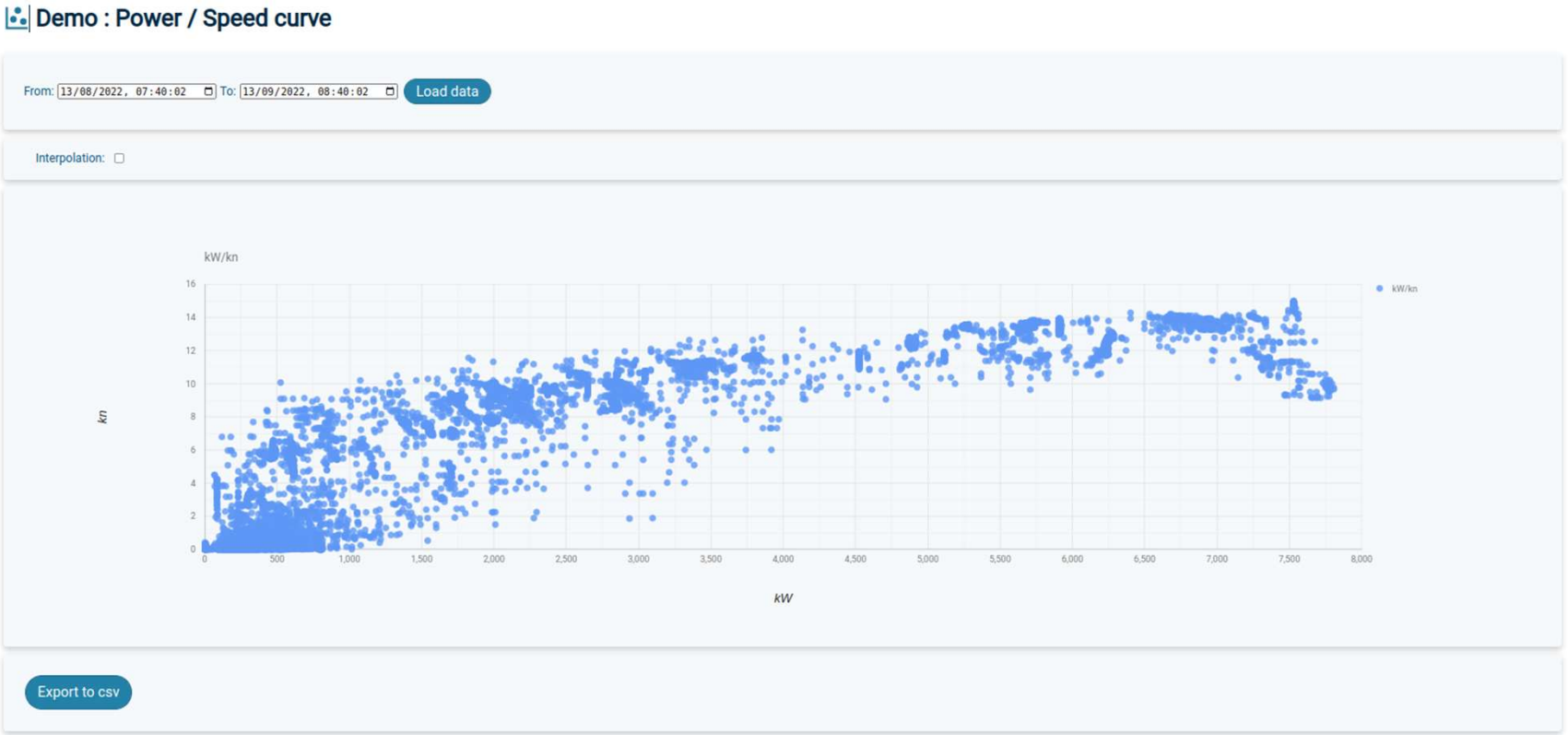
Dashboard

- Project information integrated with «live» data
- Auto-populated PLM info
- ERP integration

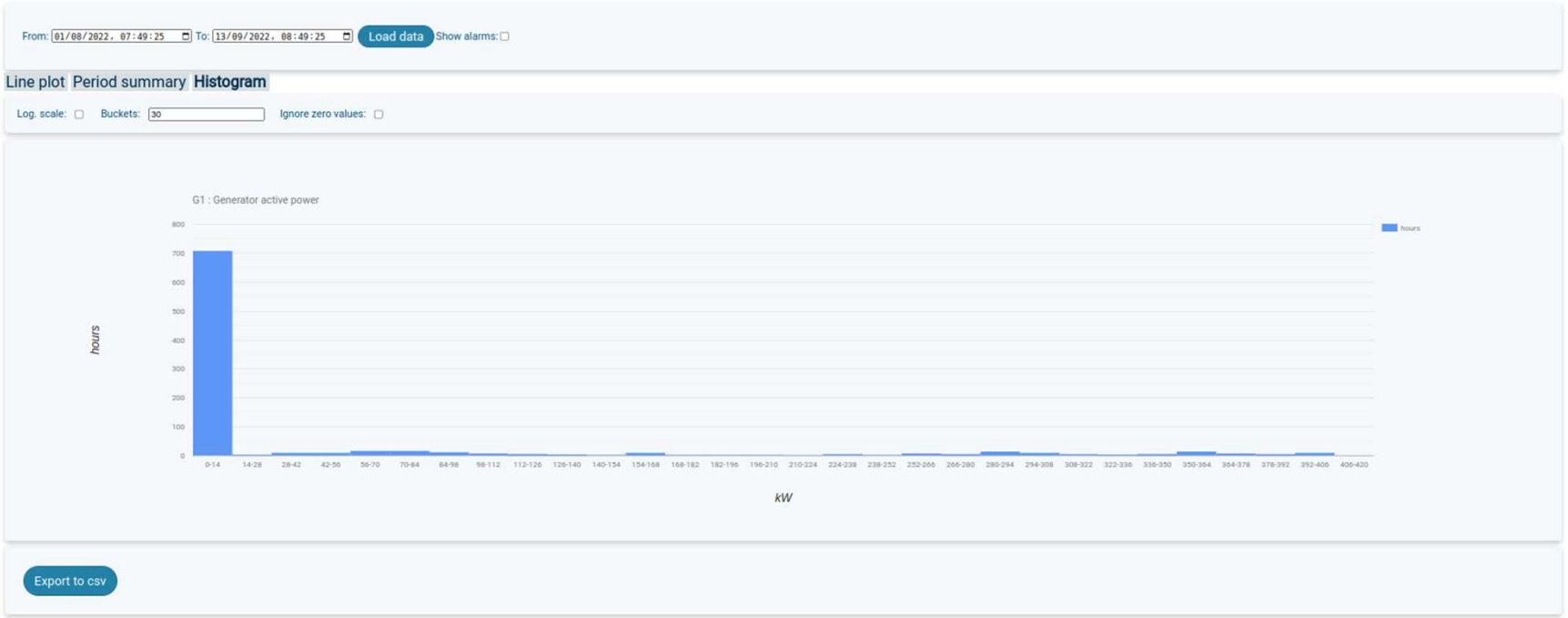
- KPI builder
- Signal and Alarm statistics
- Plotting functions
- NOx and CO_2 reports
- Raw data download
- Knowledge base
- Etc…



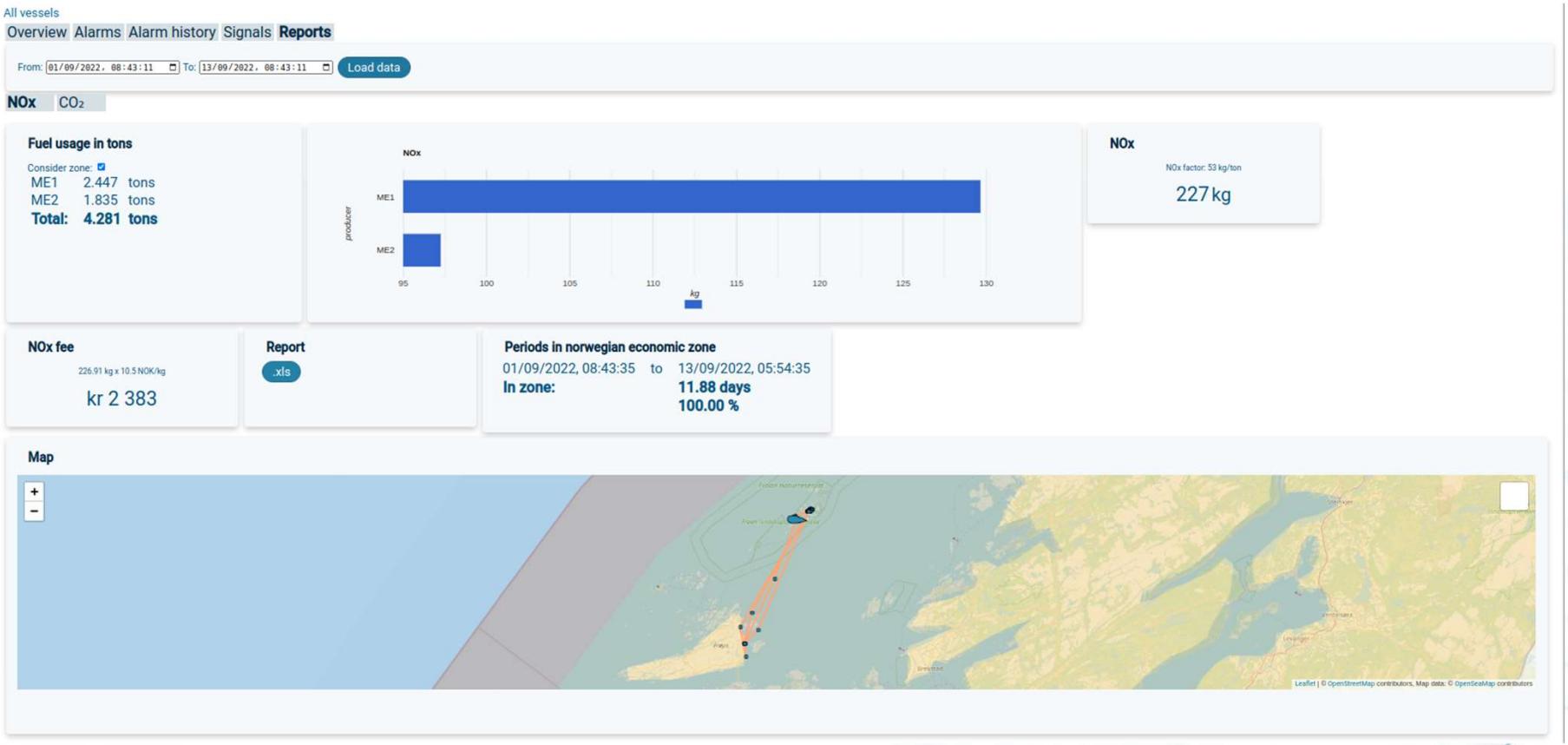
Dashboard


Demo : Power / Speed curve
From: 13/08/2022, 07:40:02 To: 13/09/2022, 08:40:02
Load data
Interpolation:
kW/kn
kn
kW
Export to csv

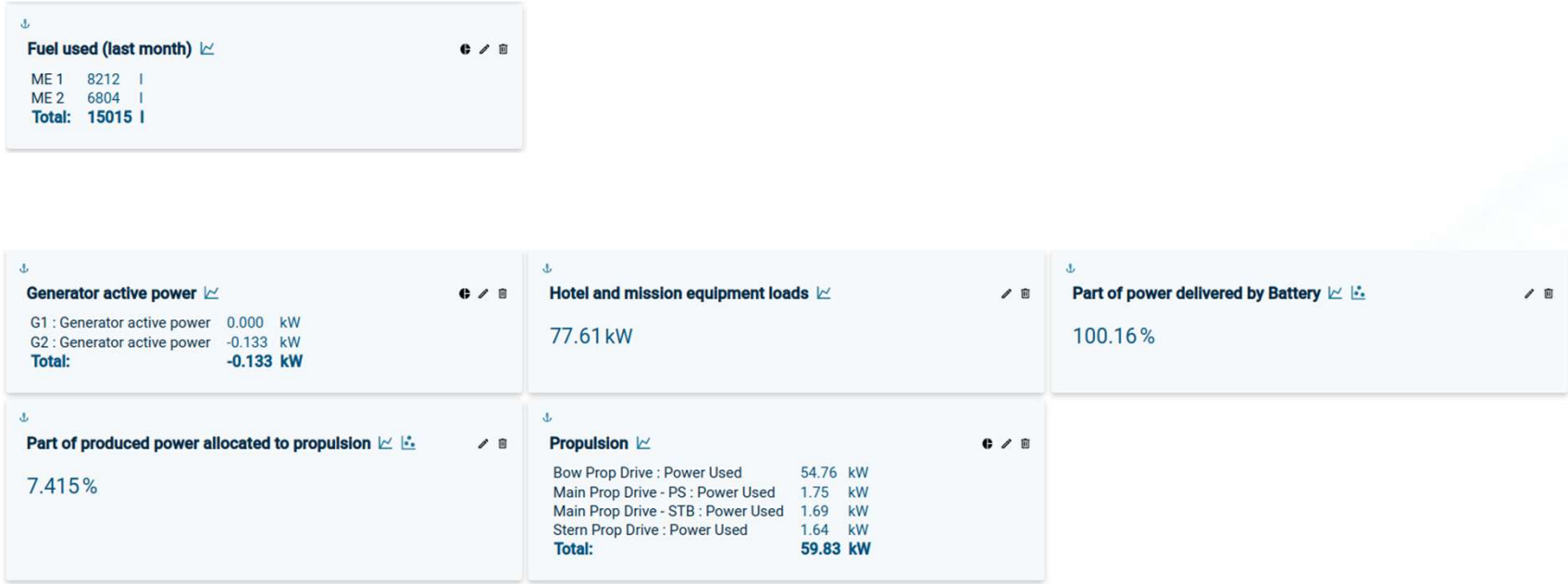
Dashboard


From: 01/08/2022, 07:49:25 To: 13/09/2022, 08:49:25 Load data Show alarms:
Line plot Period summary Histogram
Log. scale: Buckets: 30 Ignore zero values:
G1 : Generator active power
hours
kW
Export to csv

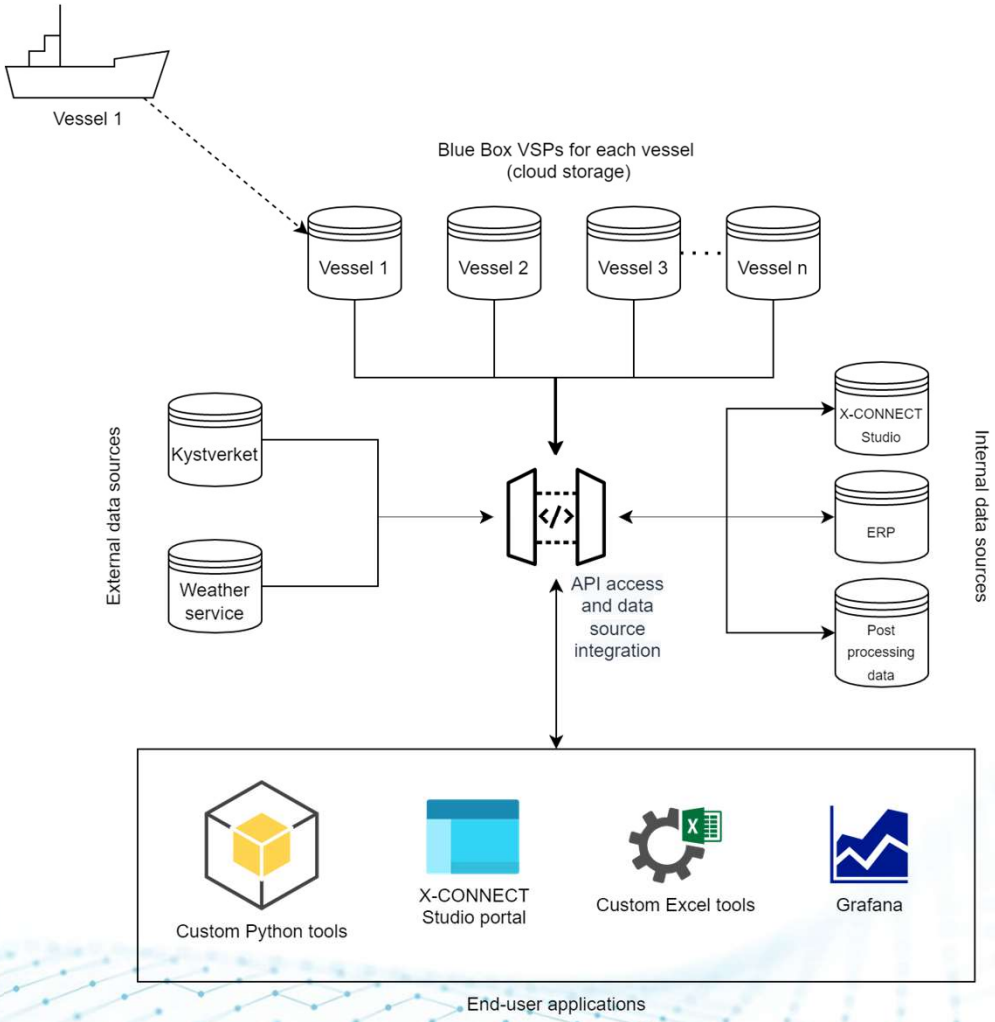
Dashboard


All vessels
Overview
Alarms
Alarm history
Signals
Reports
From: 01/09/2022, 08:43:11
To: 13/09/2022, 08:43:11
Load data
NOx
CO2
Fuel usage in tons
Consider zone:
ME1 2.447 tons
ME2 1.835 tons
Total: 4.281 tons
NOx
producer
ME1
ME2
95
100
105
110
115
120
125
130
kg
NOx
NOx factor: 53 kg/ton
227 kg
NOx fee
226.91 kg x 10.5 NOK/kg
kr 2 383
Report
.xls
Periods in norwegian economic zone
01/09/2022, 08:43:35 to 13/09/2022, 05:54:35
In zone: 11.88 days
100.00 %
Map
Leaflet | © OpenStreetMap contributors, Map data: © OpenSeaMap contributors

Dashboard

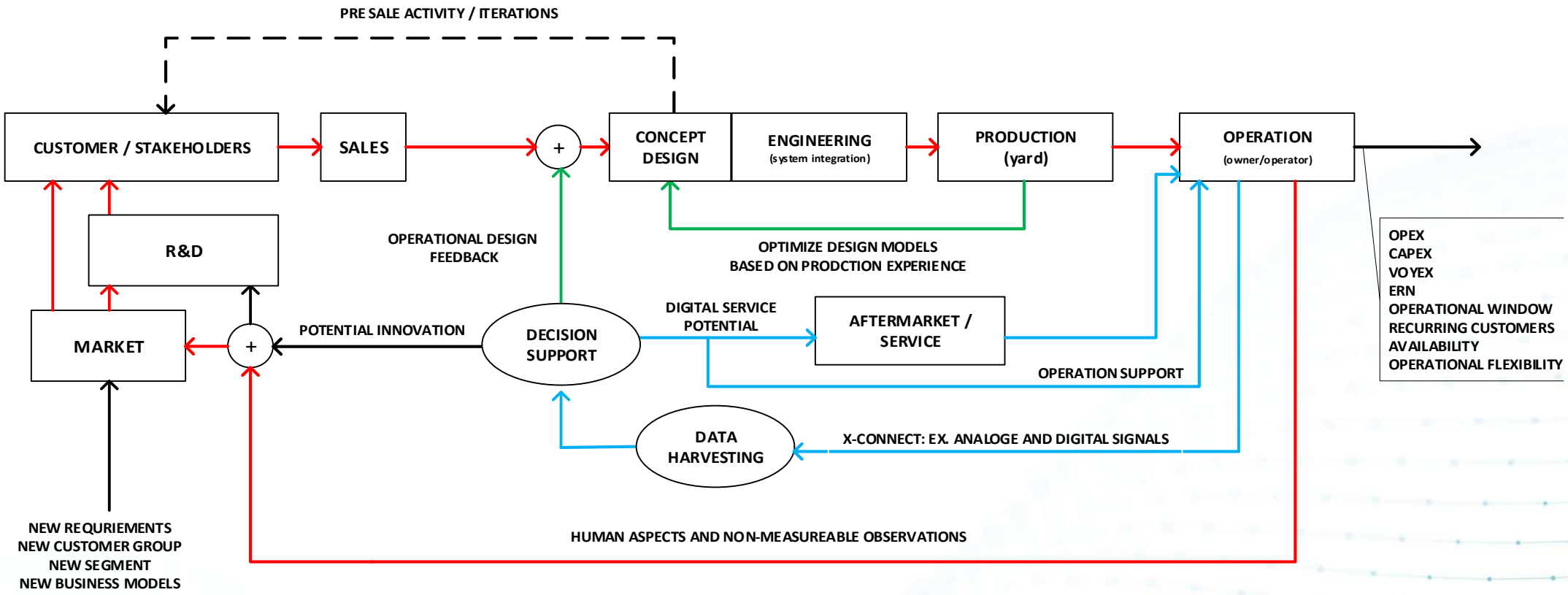

Fuel used (last month)
ME 1 8212 l
ME 2 6804 l
Total: 15015 l
Generator active power
G1 : Generator active power 0.000 kW
G2 : Generator active power -0.133 kW
Total: -0.133 kW
Hotel and mission equipment loads
77.61 kW
Part of power delivered by Battery
100.16 %
Part of produced power allocated to propulsion
7.415 %
Propulsion
Bow Prop Drive : Power Used 54.76 kW
Main Prop Drive - PS : Power Used 1.75 kW
Main Prop Drive - STB : Power Used 1.69 kW
Stern Prop Drive : Power Used 1.64 kW
Total: 59.83 kW

Possible digitalization architecture



- Distributed data sources combined by unique APIs
- Internal and external data sources combined by common data gateway (in this case the Studio portal backend)
- API access management
- No centralized «data lake»
- Architecture prepared for «microservices» and «edge computing»

The use of data in new digital processes



* Different colours represent different initiatives

The X-CONNECT® experience

For the integrator

- Reduction in engineering hours by configuring the system
- Branding & Aftermarket
- No development cost

For the end user

- Modern and user friendly
- Instant system response
- Advanced system diagnostics
- Stable operating software

For the ship owner

- Complete system update from shore
- Vessel and Management Optimalization

For the yard

- Reduced Installation and commissioning hours
- Efficient change handling

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