

# Blue INNOship

## WP 2 Vessel Performance

### Decision Support

Skibsteknisk Selskab March 2 2015



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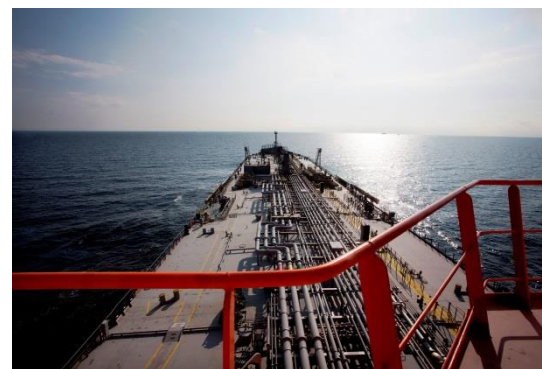


# Project Partners:

- ▶ Torm A/S, shipping company
- ▶ J. Lauritzen A/S, shipping company
- ▶ FORCE Technology, GTS
- ▶ Aalborg University
- ▶ Vessel Performance Solutions Aps, SMV



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# Motivation: Shipping anno 2015

## Fuel efficiency is important – game changer

- ▶ Fuel price increased from 140 \$/ton to 600+ \$/ton in short time (And now it is down again, was below 250\$/ton in Rotterdam...)
- ▶ Cargo rates were down, general oversupply of vessels
- ▶ Energy efficient new tonnage is being added to the market
- ▶ Competition – efficient operation becomes important
- ▶ Total fuel costs over a ships lifetime is (much) higher than the ship cost for new buildings

## Requirements from society, environmental framework puts pressure on the industry:

- ▶ Reduce CO2 emissions
- ▶ Reduce Sox, Nox emissions
- ▶ Ballast water treatment

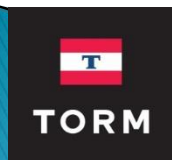
Cost effective operation → competitive advantage

The project will deliver a

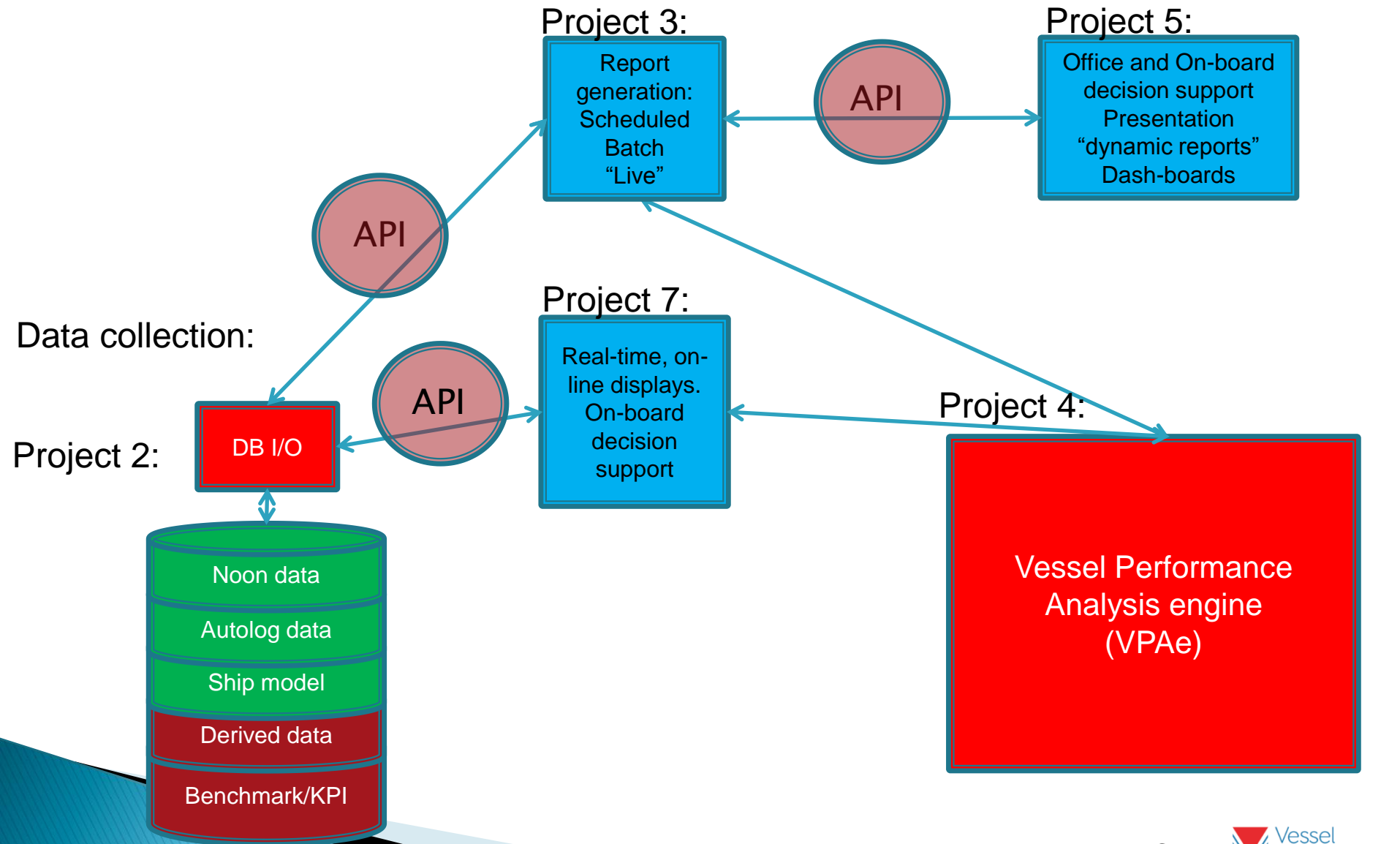
# “Vessel Performance Management Platform”

with the following characteristics:

- ▶ Modularity where the various modules will have transparent interfaces.
- ▶ An open standard that defines the interfaces between strategic modules (an Application Programming Interface (API)) for easy and transparent set-up of the interfaces between modules.
- ▶ A Vessel Performance Analysis engine (VPAe) that will convert operational data into decision support
- ▶ A platform for running performance reports or jobs
- ▶ Presentation layer for display of decision support
- ▶ The platform will define a change management process that will be supported by Key Performance Indicators.
- ▶ A conning display for real-time display of performance indicators



# Modular approach – Open Standard for interfacing



API: Application Programming Interface

# Project roles:



Torm A/S and J. Lauritzen A/S provides:

- ▶ Ambition, knowledge and requirements
- ▶ operational data from their fleet in the API format

FORCE Technology is responsible for developing the open standard and the real-time display

Vessel Performance Solutions Aps will be the project manager and develop the core modules for the platform

Aalborg University will provide a product overview, change management support and methods for evaluating data source quality

