Blue INNOship

Project name:

Monitoring and Performance

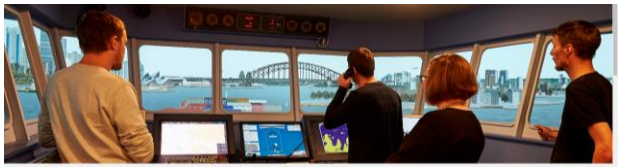
Project no. 6

Project participants:

SDU, SIMAC, Automation Lab, Principia North, A2SEA, Esvagt, Færgen

Short project description

The aim of the project is to develop a system for energy optimisation of ships with a focus on working vessels and minor ferries. The system must motivate the crew to actions promoting energy efficient operation of the vessel.



AutomationLab

Human factors and decisions

Technical systems

Knowledge transfer

Situation awareness - crew and office

Monitoring and data analysis

Education and training

Best practice guidance system
(Decision support system)

PRINCIPIA NORTH

SDU

Key features or key findings

What key features or findings would you like to highlight from your project work until now?

1) Observations on board, interviews and workshops
   Performed nearly 80 interviews with officers on board and people employed in shipping offices – on energy efficiency issues, procedures, best practices, operational and technical issues but also attitude and awareness
2) Experience from test in SIMAC Full Mission Simulator – technical and operational issues, awareness and the importance of both knowledge sharing and training of the officers on board to understand information received from data logger systems
3) Development of a flexible modelling framework started – A system special for working vessels
4) Data logger systems developed for all vessels – installed or ready to be installed

Project challenges and solutions

What challenges have the project team experienced and how has the team solved them?

1) Ships are sailing!
   Project work must fit in to daily operation on board

2) The flexible working patterns of the vessels
   Difficult to plan visits and installations

Solution: Be flexible and use of Full Mission Simulator at SIMAC

Why should you buy our solution?

What makes your solution the preferable one compared to other available solutions?

The modeling framework

+ is specially designed for working vessels and their problems with high crew involvement.

Current Technology Readiness Level								
1	2	3	4	5	6	7	8	9
		x						

Best practice guidance system

+ Open source software platform for solving multi objective problems from an operational perspective

Current Technology Readiness Level								
1	2	3	4	5	6	7	8	9
		x						

Automation Lab - Data logger

+ Easy access navigation and control system data

Current Technology Readiness Level								
1	2	3	4	5	6	7	8	9
						x	x	

Principia North - Hydrodynamic ship models

+ improve the efficiency of the ship by analyzing her residual resistance in sailing condition

Current Technology Readiness Level								
1	2	3	4	5	6	7	8	9
		x						