

CUSTOMERS & NESTE SUCCESS STORY

VELO

Vessel Logistics
Situation-dependent speed optimization



VELO

Situation-dependent speed optimization

*4.2 M USD saved fuel costs
15400 tons of saved CO2*

TO WHOM?

Baltic time charter fleet arriving to Porvoo terminal. To people working at terminal, vessel and shore-side (pilots, tugs).

CUSTOMER NEEDS

Optimize vessel arrival time based on jetty availability. Make communication between stakeholders precise and efficient.

TARGETS

Guiding messages helps vessel to arrive to the jetty “just-in-time” and provide transparency to fuel and emission savings.

+

Reduce the time spent in the problematic anchorage areas
Improve the port utilization



BEFORE: WAITING FOR HARBOURING



Vessel approaches harbour



Vessel anchors in front of harbour to wait



Vessel anchors to available jetty

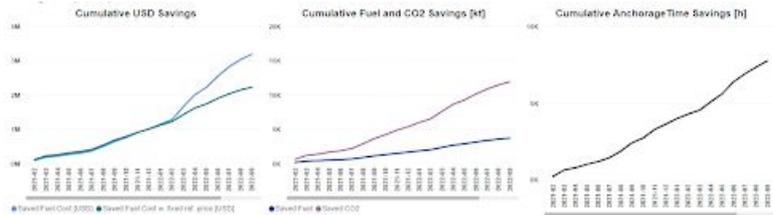
CURRENTLY: ARRIVING TO HARBOUR JUST IN TIME



Vessel receives message about jetty availability and adjusts speed accordingly



Vessel arrives to harbour just in time to available jetty



Arrival Date	Departure Port	Departure Port Code	Vessel Name	Voyage Number	Saved Fuel Cost in Real HR price (USD)	Saved Voyage Fuel Cost (USD)	Saved Voyage Fuel (t)	Saved Voyage CO2 (kg)	Saved Anchorage Time (h)	Saved Voyage Fuel %
2023-02-26	RC	SHAL	YANARIS	230001	1,540.00	2,407	268	832	8	-55.65 %
2023-03-20	Kokkola	FKOK	KISLA	230008	8,657.11	9,937	1919	3227	18	-48.25 %
2023-03-23	Sandvika	SDSD	SUNILA	230009	3,338.38	3,915	517	1754	8	-23.11 %
2023-03-22	RC	SHAL	STEN BOKORN	230001	5,001.98	4,712	-514	-1649	8	-17.60 %
2023-03-22	Valkeas	VALV	TELES	230003	678.00	1,380	513	883	2	8.42 %
2023-03-20	Skje	SKJK	JAV/INGENGA	230004	458.18	466	-578	-2832	-2	-4.67 %
2023-03-16	Kaivanta	KAIK	KISLA	230005	-108.18	-309	-241	-121	0	-1.00 %
2023-03-16	Steingrand	STST	NAVIGATOR SAUKA	230007	3,358.38	-6,738	850	2864	13	-1.00 %
2023-03-17	Valkeas	VALV	TELES	230002	7,090.68	10,890	1200	5843	-28	-1.11 %
Total					2,607,816.58	5,938,271	8,687.38	14,506.65	-1,131	

OUR SOLUTION

Connecting the Porvoo Harbor List information directly to the vessel. When terminal makes vessel specific changes regarding arrival time and jetty availability, vessel will receive instructions immediately by email and text message. No need for operators to act as a messenger in between!

With updated information, **the vessel can adjust the speed** considering the vessel technical and safety **to arrive to the jetty "just-in-time"** and update the possibly changed arrival time to other relevant stakeholders too. This saves fuel, reduces emissions and improves port utilization.

"It is working nicely. I hope we can get the same to other ports too."

-Captain of one of the ships using the system



21-22

**COST OF SCRIPT
< 500 EUROS**

4,2 M USD*
CUMULATIVE SAVED FUEL COSTS

15400 tons *
CUMULATIVE SAVED CO2

10500 h*
CUMULATIVE REDUCED TIME IN ANCHORAGE

*Cumulative savings 2/21-3/23

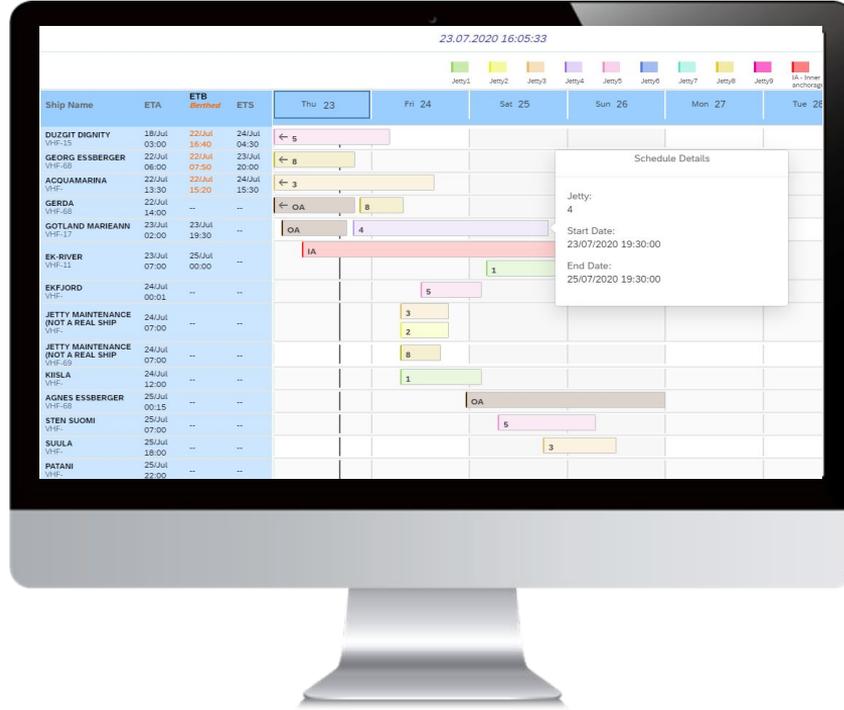


UPDATE ARRIVAL TIME

Terminal updates the arrival time for a vessel to Porvoo Harbour list. Vessel is informed Contact details are taken from Norppa position list

*“Dear Captain,
your schedule berthing time at Porvoo voyage has been updated by the terminal to: 23.11 19:00 UTC - Jetty 1.
Fuel saving when adjusting speed to schedule berthing time is estimated to be 0.4 tons equals 1.1 tons of CO2 equivalent emissions.*

Rgrds, Chartering Operations”



Communication between terminal, vessel and shore-side of schedule, fuel and emission savings

GUIDING MESSAGE

Vessel receives an automated, guiding SMS and email with fuel and emission saving potential. Arrival update is send also to tugs and agents.

OPTIMIZING ARRIVAL TIME & SHARE INFORMATION

Vessel adjusts the speed accordingly and updates the possibly changed ETA info for stakeholders. **Safe navigation is always priority one** and speed adjustments should never be compromised.

RECOGNITION VIA THANK YOU MESSAGES

Vessel receives a thank you SMS and email in case it has taken the needed actions based on the previous message. In case vessel has not taken any actions, a reminder SMS and email is send.