



Port of Fujairah takes first steps on the Road to become a World Class port

Published: 09-02-2016

The Oil and Chemical Department of the Port of Fujairah (PoF), Fujairah Oil Tanker Terminals (FOTT), selected Systems Navigator in 2014 and 2015 as an independent consultant to support the development of a roadmap for the future of the Port. The main objective of this study was to be recognized as a World Class Port, known for efficient and safe operations and vessel handling. Within one year after the delivery of Systems Navigator's findings the Port already shows impressive improvements.

Besides analyzing investments in port infrastructure, Systems Navigator evaluated port performance and advised on operational improvements to achieve targets set by the project team. Recommendations for improvements focused on decreasing vessel turnaround times, which were the cause of long waiting times at the port, were delivered to FOTT.

Today, a year after project delivery, Systems Navigator has analyzed current port performance to study if FOTT is moving in the right direction. The analysis focused on the turnaround time of vessels, in particular the pre and post operations time, the pumping time and the vessel waiting time. The outcomes of the study show that PoF/FOTT is heading into the right direction.

Pre and post operations time

Pre and post operations time include all activities surrounding product transfer, so typically from the first line ashore until the start of product flow and from the stop of product flow until all clear. By implementing Systems Navigator's recommendations in a short timeframe the FOTT project team managed to decrease the total pre and post operations time for vessels larger than 20k DWT by an average of 18% and vessels smaller than 20k DWT by an average of 23%.

Pumping and related vessel waiting time

Current pumping times are gradually reducing compared to times realized in 2014. However, new simulation analysis also shows that the total (accumulated) pump time needs further improvement to reduce the vessel-waiting time at the anchorage. This is an important performance indicator for ports and terminals. By reducing the turnaround time of vessels the expected waiting times are reduced as well. The achieved decrease in pre, post and pumping times therefore leads to reduced vessel waiting time. With the existing/continuing logistics and predicted growth for 2016, the 9 berths of FOTT could accommodate up to 67 mln tons throughput in combination with a maximum berth occupancy of 70%.

Conclusions

By implementing Systems Navigator's recommendations FOTT managed to increase the port throughput while reducing vessel turnaround and waiting times. Simulation analysis showed that the growth in port throughput would not have been possible without the achieved improvements to date. PoF/FOTT has taken its first steps on the Road to a World Class Port.

About Systems Navigator

Systems Navigator is an independent consultancy company based in Delft, The Netherlands. Systems Navigator specializes in the design, development and implementation of decision support solutions based on Operations Research technology. Our specific expertise is in using both discrete event simulation as well as optimization for decision support models that can predict system performance, as well as can be used for operational decision making by means of planning and/or scheduling. Systems Navigator successfully delivered over 60 projects for storage terminal companies all over the world.

About Port of Fujairah

Port of Fujairah is a multi-purpose natural deep water port, strategically located 70 nautical miles south of the Straits of Hormuz at the crossroads of shipping lanes between East and West and as such one of the United Arab Emirates' vital facilities. Today the Port is the 2nd largest bunker port in the world with around 14,000 vessels received at the anchorage and over 4,300 vessels handled in the Port.