PORT PERFORMANCE ANALYSIS OF TELUK LAMONG MULTIPURPOSE TERMINAL

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Abstract

To anticipate the needs of the future cargo terminal throughof port services, PT Pelindo III (Persero) accelerate the realization of Teluk Lamong Multipurpose Terminal located in Lamong Bay, Gresik – East Java. This is expected to be one of provisions to reduce stagnation at TanjungPerak Port. The currently facilities of Teluk Lamong Multipurpose Terminal at the beginning operation are designed as follows: 1 international container berth, 3 domestic container berths, 1 dry bulk berth, container yard, stockpile, 5 unit of Container Cranes (CC), 1 unit of Shipunloader, 1 unit of Conveyor, 10 unit of Automatic Stacking Cranes (ASC), and 30 unit of Headtrucks. The problems raised in this study are how service performance of Teluk Lamong Multipurpose Terminal at long term achieved and how the port development to anticipate increase of cargo throughput in the future will be fulfilled. The methods used in this study is a simulation modeling scenarios method using ARENA 5.0 software, including the prediction of the throughput for container and dry bulk using linear regression analysis method. The indicators of Port operational service performance such as Berth Occupancy Ratio (BOR), Yard Occupancy Ratio, and Utility of the equipment will be used to assess the performance of Teluk Lamong Multipurpose Terminal.

Keywords: Terminal Simulation, BOR, YOR, ARENA
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