ABSTRACT

The stock availability in each branch or store for responding to customers is significant. The transportation network between central distribution center and stores for replenishment stock at stores is also important. This study focuses on truck assignment. The purpose of this paper is to develop improved truck scheduling for the store's stock replenishment in order to increase truck utilization, resulting in logistic cost reduction. This study develops a transportation strategy, incorporating the current situation that has many constraints. The transport strategy includes vehicle routing and scheduling, routing sequencing, and implementation of a routing and scheduling method. A proposed algorithm is implemented and the result is compared with the current outcome and lower bound, which show significant improvement. The scope of this paper is to experiment with a model for establishing routing scheduling. The stores selected as pilot stores are located within 300 kilometers from a central distribution center, and carry products on pallets in containers.