EFFECTIVE ROUTING AND RESOURCE PLANNING (ERRP) USING CENTROID BASED HEURISTIC ALGORITHM

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Abstract

The timely procurement and delivery of materials / equipment to yard, site and assembly locations requires a huge team effort and is paramount for the successful work done for shipyards and construction sites.The ERRP deals with pickup and delivery of materials from a depot to delivery point among the sites or yards by a fleet of vehicles which are operated by a set of drivers who perform movements on an appropriate road network.Details of this paper is to study centroid-based heuristic algorithm by Kwangcheol and Sangyong[1] for clustering the delivery points with three phases: cluster construction, cluster adjustment and nearest neighbor algorithm for Travelling Salesman Problem (TSP) for route establishment to come out the feasible effective routing and resource planning result to help in real world heavy industries' logistics.