**ABSTRACK** 

Distribution refers to the steps taken to move and store a product from

point of origin to point of destination. Usually the company faces distribution

problems associated with limited resources or capacity that the company should

distribute its products to various destinations.

PT. Circle K Indonesia Utama, Bandung has 42 Circle K outlets scattered

in Bandung. In this time, PT. Circle K Indonesia Utama, Bandung using 5 fleet

with five distribution routes to serve these outlets. But the design of the five

routes of this distribution is only based on estimates, without any mathematical

calculations that support, so that the optimization capacity of each fleet is still

lacking, it can be seen from the number of empty space on each vehicle

dispatched. This case can be inserted into Single-Depot CVRP.

In this study will be analysed logistic distribution route using Clarke and

Wright algorithm in order to obtain the optimal route, so that known the number

of trips that should be conducted in accordance with the capacity of each fleet.

Data distance between outlets and outlets to the depot will be analyzed to obtain

the savings distance of each pair combination outlet, then the savings distance will

be ranked to determine priority in determining order of a route, taking into

account the total demand of outlets in a single route in order not to exceed

capacity of the fleet.

From processing data based on Clarke and Wright algorithm, obtained four

proposals route a more optimal. By using the four proposed routes, the fleet is

used only four pieces fleet with a total travel distance of 17.718 km shorter than

using five routes in the existing condition. In terms of distribution cost efficiencies

can be obtained distribution cost savings for Rp1.754.500, - per month.

**Key words**: Distribution, Single-Depot CVRP, Clarke and Wright algorithm.