

## ABSTRACT

Progressively expand telecommunications world in this time, operational activity utilize to maintain the network performance and take care of the peripheral reliability used to conduct the relation of telecommunications also progressively expand. Operational pattern network management with the management system with its own which commonly use in conducting operational activity by telecommunications operator in this time have started replaced with the appearance of pattern of new network management operational recognized with the pattern of operational of Manage Operation (MO). To know which one are used better of the Operational pattern network management by telecommunications operator ( in this case Telkomsel) to conducting operational activity, hence conducted by a calculation with seenly side of expense efficiency from each pattern of the operational network management.

Total cost calculation of Operational pattern network management with the management system with its own conducting with Life Cycle Cost (LCC) method. In expense calculation by using method LCC, expense differentiated to become two group, acquisition cost and sustaining cost. Acquisition cost consist of a purchasing tools, invest SDM, and to conducting a initial training. While, sustaining cost consist of employ the employees, cost of levying tools, cost of accommodate the car, rent car, management fee, *training*, SPMS and Support System (include 2<sup>nd</sup> line maintenance), and expense of treatment tools. For the calculation of expense of pattern MO, conducted by calculating total cost Network Element (NE) of pursuant to range NE of is set in contract MO.

From the calculation result which have been conducted seen that total cost yielded second pattern of operational of network management have a difference, is the following :

|            | Net Present Cost MO | Net Present Cost Sistem Pengelolaan Sendiri | Selisisih Net Present Cost | Persentase |
|------------|---------------------|---|----------------------------|------------|
| Regional 3 | 775,387,354,703     | 577,396,784,868                             | 197,990,569,835            | 34%        |
| Regional 4 | 169,882,873,179     | 142,628,886,739                             | 27,253,986,441             | 19%        |
| Regional 5 | 154,350,744,659     | 124,235,773,464                             | 30,114,971,195             | 24%        |

Pursuant to overall of expense component which is reckoned in a management system with its own can be said that total cost yielded by a management system with its own more efficient and used better in comparison with pattern MO.

Key words : *Life Cycle Cost, Manage Operation (MO)*