

## **ABSTRACT**

*TELKOM Maintenance Service Center (MSC) is a business unit for supporting role in PT. TELKOM which has core businesss in operational maintenance services in PT. TELKOM. Software for determining minimum stock of repair components is developed in order to complete the existing information sistem wich operated by TELKOM Maintenance Service Center since 2000, called ATEMIS, to administrate their services replenishments. Determining minimum stock of spare part's component is very important for financial and operational performance. Writer is trying to give an alternative approach by using linier, power, exponential and logarithmic distribution patterns to be compared with the historical data of components daily consumption, then count the error of each distribution pattern. Pattern which has least error will be recommended as the best approximation to be used in forecasting analysis.*

*Software is developed using Decision Support System theory and uses the same application programming tools with ATEMIS. Software was tested for accuracy, technical performance and user's acceptance using questionnaires. According to testing which have done for 25 most active components in recent years. The results are: 52% deviation for forecasting's accuracy against data components using realization, and 122 minutes of processing time for performance testing against 1000 item components. User acceptance testing give results : 72% for user-friendly, 47% for response time, 52% for lay-out, 30% for accuracy and 65% for effectivity.*

*Most results of minimum stock forecasting are still has high enough deviation against the reality, so it suggested to further analyzing use other alternatives approaching methods .*

*Key words : Minimum Stock, Distribution, Linier, Power, Exponential, Logarithmic.*