Abstract

PT. Mobile-8 Telecom Tbk. is one of the largest operators CDMA-based cellular services in Indonesia. In CDMA communication systems, especially for users Fren providers, network performance is an important thing which is closely related to system reliability and service quality. To support these systems, The repairs for BTS system has to be done quickly to minimize interruption period. Therefore, it is necessary to propose a spare parts inventory control system base stations to anticipate the possibility of stockout when an interruption occurs, so the customer service level is increased.

The method to be used in this research is the Monte Carlo simulation to determine the parameter values associated with the management of spare parts inventory. The basic model used is the (R, s, S) base-stock model with periodic review. Initially, the value of s and S will be calculated with a formula that accommodates the demand normal distribution. Due to the nature of normality is usually not fulfilled, then the simulation will be used to fix the initial values obtained.

Determination of parameter values with the simulation produces a high service level with inventory costs are slightly higher.

Key Word : Spare parts, Periodic Review, Monte Carlo