

ABSTRACT

PT Telkom Indonesia, Tbk is one of the state-owned enterprises (BUMN), this company is engaged in telecommunications services that are required to carry out the service process perfectly. But the process of providing the best service desired by customers sometimes occurs in matters that disrupt the process, one of the problems is the unavailability of components at the time of the occurrence of damage that will hinder service to the customer. GPON device is a device that has the highest level of demand for repairs, these repairs include repairing spare parts or changing parts. To identify the critical subsystem of the GPON Device, the Risk Matrix method is used, so that the critical subsystems obtained from GPON devices are Fanbox C220, EI8E (Electrical Interface card) and GPU A GPON Uplink Card. In the implementation of maintenance activities often found the existence of subsystems that have failed in carrying out its main functions so that it needs to be repaired or replaced. In overcoming these problems, a GPON device subsystem management policy is carried out using the Reliability Centered Spares method so that it can determine the number of spare parts available for critical subsystems. Based on the results of the study using the Reliability Centered Spares (RCS) method, it was found that the critical Fan2 C220 subsystem requires 46 spare parts, the critical subsystem EI8E (Electrical Interface Card) requires 41 GPU A GPON Uplink Card critical spare parts and subsystems requiring 31 spare parts . And probabilistic inventory is done to determine inventory in determining the size lot of orders, safety stock, and re-order points. From the results of this study it is obtained for lotsize C220 Fanbox 7, safety stock 4, and re-order point 4 and for EI8E (Electrical Interface Card) lotsize 8, safety stock 2, and re-order point 2. GPU A GPON Uplink Card lotsize 9, safety stock 2, and re-order point 2.

Keywords: Inventory Probabilistik, Risk Matrix, Reliability Centered Spares, Spare part