ABSTRACT

At PT Medco Energy the cabling lines and supporting infrastructure in the data center generally consist of a combination of raised flooring system and cable tray overhead. Not having a good data center topology structure according to the TIA-942 standard will threaten the company's operations if there is a system failure or connectivity failure. Therefore a design is needed so that the existing data center at PT Medco Energi can reach the standards specified specifically for the Telecommunication Cabling Infrastructure. In designing the Telecommunication Cabling Infrastructure for the data center refers to the TIA-942 standard and uses the PPIDOO Life-Cycle Approach method that focuses on the three initial stages, namely prepare, plan and design. This method was chosen because this method is very structured and in accordance with PT Medco Energi's plans in developing data centers continuously. The design of the data center room topology design that complies with the TIA-942 standard for PT Medco energy is the final result of this study. The results of this design are in the form of a proposal plan that focuses on the data center structure topology, wiring redundancy paths, and the addition of blanking panels on the server rack and pipe cabling for each cable used as a link from one room to another. With the proposal given, it can maintain the data center from security risks that will disrupt the operations of PT Medco Energi.

Keywords : Data Center, TIA-942, Telecommunation Cabling Infrastructure.