## ABSTRACT

PT XYZ is a subsidiary that focuses on telecommunication connectivity. At PT XYZ there are several projects being carried out including the Feeder resilience project. The Feeder resilience project is a network construction project in the form of a Feeder that can be recovered effectively and efficiently by PT XYZ. So if a disturbance occurs, this development can help the recovery system by moving the network to FTM (STO). This project is designed to restore the network, this is the first project carried out by PT XYZ because the previous parent company did not have such a system.

The existence of new activities causes the Feeder resilience project undertaken by PT XYZ to have risks that can cause delays and affect the course of work on the Feeder resilience project, one of which is damage to the existing aerial cable. This risk has an impact on several factors, namely productivity, performance, quality, and changes in project costs. Therefore, it is necessary to have further risk analysis and design (risk register) to find out what risks will occur and know how to respond to risk (risk response) by using the probability & impact matrix to determine the priority of risks that will occur. The method used in this final project is a qualitative method because it can create subjective design results based on real phenomena according to events in the field on projects by performing qualitative risk analysis. The risk identification that has been obtained will be given an assessment based on the probability of the risk occurring and the resulting impact including time, cost, quality, safety & security, and scope by the relevant stakeholders and followed by determining the risk response to be carried out.

It was found that there were 175 identified risks in the risk register with 2 types of risks, namely positive risks in the form of risks that could have an impact in the form of opportunities on the project with a total of 149 risks and negative risks which were risks that had an impact in the form of threats to the project with a total of 26 risks. The risk responses carried out for 175 risks include 24 risks with accept risk response, 39 risks with avoid risk response, 4 risks with enhance response, 1 risk with escalate risk response, 1 risk with exploit risk response, 104 risks with mitigation risk response, and 2 risk with risk response transfer.

## Keywords: Risk register, Risk response, Probability Impact Matrix