## **ABSTRACT**

PT XYZ Company is a company located in Jakarta. PT XYZ is a company engaged in the telecommunications sector. In its business processes, the company PT XYZ has a subsidiary that is engaged in solving problems in the IT field. The company PT XYZ got the project from PT. ABC which is to add modules to the core information system. This project is an addition to modules such as ASKRED, ASKREDAG, and ASUM. This project is planned to last for 34 weeks, which means starting in July 2021, it is planned to be completed in March 2022. The current condition of the project is that the project has been delayed in its 25th week which has occurred since the 20th week. The delay in the project is caused by the priority error in the project and the delay in finalizing user requirements.

The method used in designing this design involves collecting data using historical company data and also using interviews with project managers to be able to formulate designs for the problems that have been obtained. The design stages taken to design the project are through the preliminary stage to find and formulate problem formulations and find alternative solutions to the problems they face. After that, it was continued to the stage of solving data collection using data in the form of SOW, Project Cost, Project Schedule, WBS, and WBS dictionary. After that, proceed to data processing which involves the critical path method to be able to identify the critical path in project activities so that it can proceed to the crashing process. The results of the crashing will be presented in the form of a Gantt chart and S-Curve. This result will be the Schedule & Cost baseline. The results of this design will be verified based on literature studies and also the standards set by the company. At the data analysis stage, validation and evaluation of the design results will be carried out. The results of the design will be an analysis of how the plan for implementing the design on the project will be. The last stage includes making conclusions and suggestions based on the results of the design on the ACS Phase 1 development project PT. A B C.

Critical Path shows that the critical path is in the activity of developing 5 new toc personal accidents - adding risk spreading - monitoring reports on details of reas production per broker per ceding reinsurer (FMS journal base) - outgoing treaty journals & changes in the pattern of outgoing ACS reas journals because they

have a total float of 0 with the total duration of these activities is 108 days. The critical path on that produces a critical path that ends on June 7, 2022, while the project is scheduled to be completed on May 8, 2022 and the project will be delayed for 30 days. The contract states that each day of delay will be fined Rp.8,551,840 per calendar day. This means that the project has the potential to experience a fine per calendar day of IDR 8,551,840 which if accumulated will amount to IDR 256,555,200. Project acceleration is obtained using the crashing method which can accelerate the project duration from 108 days to 82 days by extending the working time for three hours. The project's new schedule baseline will start on January 06, 2022 until the beginning of May 02, 2022 which will be carried out for 13 weeks or 82 days. This schedule acceleration requires a fee of Rp. 779,200,533. This fee is cheaper than the normal fee of Rp67,698,950 cheaper than the normal fee which is subject to a 30-day fine at a cost of Rp846,899,483. The results of the design in the form of a new schedule and cost baseline and SOPs for using excel and spreadsheets in this final project design were validated using the interview method to the project manager of PT. A B C. The validation results show that the design results are accepted by the project manager. The results of this design have several limitations, such as the design requires skills in determining the critical path of a project, the results of crashing can increase project costs and potentially exceed the initial project budget, Overtime costs on projects can change as government policies change, the new baseline is only a reference for the project. PT ABC's Phase 1 ACS Development Project. Implementation of the design results requires training related to methods that have been integrated in order to produce uniform and accurate output.

Keywords —Standard Operating Procedure, Critical Path Method, Gantt Chart, Crashing, Delay.