ABSTRACT

Time and cost greatly influence the success and failure of a project. The benchmark for project success is usually seen in the short completion time with minimal costs without compromising the quality of the work. Therefore, efforts to optimize time and cost are very important in the planning of a project. This research uses the Crashing method aimed at finding the crashing cost by adding time acceleration to the construction of the Balige Terminal Balige in Toba Regency, North Sumatra. This research was conducted by analyzing the work network and the acceleration of tasks performed that are on the critical path or long duration. From this research, the results of the Crashing analysis showed that the normal project duration was represented as 256 days, while the accelerated project duration became 209 days. In terms of cost, the Direct Cost for the normal duration reached Rp.128,403,579.37, while during the accelerated duration, it decreased to Rp.120,403,579.37. Indirect Cost at normal time is Rp. 13,501,266,690.31, whereas Indirect Cost at accelerated time becomes Rp. 12,050,266,690.31. The total cost at normal time is Rp. 13,629,670,269, while the total cost at accelerated time decreases to Rp. 12,170,670,269. It is concluded that by reducing the project duration, there is a decrease in costs both in direct costs and indirect costs, resulting in total cost savings. This illustrates the importance of analyzing the effects of acceleration on project costs and duration in project management effectively to minimize costs and expedite project completion.

Keywords: Construction Management, Project Acceleration, Crashing Method.