ABSTRACT

Planning until controlling process during construction work are important activity of a project. Success or failing of the project caused by not maximal planning and insufficiently effective controlling, so that the project activity is inefficient. As the consequences of these impacts suffered project delay, decreasing of quality, and increasing performing cost. Project management working time drew the line by given schedule, so the manager of project shall get to anticipate condition changing.

PERT-CPM method can be utilized to manage project working time become more efficient and effective. In order to reduce the impact of the project delay and cost overruns, three alternatives methods can be drawn; (i) additional workforces/labours, (ii) working overtime, and (iii) subcontracting. Acceleration of duration is done on the activities at the critical path and total days that given on each alternative is equaled.

Result showed that subcontracting alternative figured out the optimal time to finish the project which is 150 days with projects total cost Rp21.086.217.636,83.

Keywords: planning, controlling, project management, PERT-CPM method, crashing