

EVALUATION OF COST OVERRUN ON THE IMPLEMENTATION OF THE NATIONAL ROAD PROJECT IN THE PROVINCE OF EAST JAVA USING STATISTICAL PROCESS CONTROL (SPC)

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ABSTRACT

The complexity of the implementation of the National Road project in East Java province often causes differences in what has been planned with the real implementation, so it always faced the same problems, such as the occurrence of the delay in the work and swelling costs (cost overrun). Based on the facts, the situation shows that around 20% of the total implementation of the existing national road projects in the public works Ministry is experiencing swelling costs (<http://emonitoring.pu.go.id>), hence the need for an evaluation of cost overrun on the implementation of the national road project in East Java province.

This research was conducted with the aim to find out the cause of the occurrence factor of cost overrun by identifying the risk event occurring on the implementation of the national road project in East Java province in the period of 2011 s/d by 2013. Furthermore the results of the evaluation will be carried out identification of quantity cost overrun by using the method of Statistical Process Control (SPC) which is doing the mapping of factors cause cost overrun with pareto diagram, perform analysis of the roots of the problems occurred with the fishbone diagram as well as the analysis of quantity cost overrun with control chart and subsequently carried out action over the handling of the risk of root problems, which is obtained by conducting interviews to expert as well as a review of the literature on the environment of the Ministry of public works of East Java province.

Results of the evaluation of the cost overrun risk events that have occurred on national road projects in East Java province, found 29 events are grouped in 5 risk factors cause the occurrence of cost overrun Factors, namely: Factor Design Change (42,11%), Coordinating and Communication Factor poor in organizations (21,05%) Factors mistakes in decision making (17,54%), Factor of delay in Delivery / land use (14,04%) and Factor delay in Payment Terms (5,26%).

Keywords : Cost Overrun, Implementation of the National Road Project, SPC methods.