

ABSTRAK

Permasalahan keterlambatan durasi waktu proyek sangat umum ditemukan diberbagai proyek konstruksi di seluruh Indonesia. Terdapat banyak metode yang dikembangkan untuk mengatasi permasalahan ini, salah satunya adalah metode Earned Schedule. Metode ini dikembangkan dari metode Earned Value yang mengubah indikator biaya yang terdapat pada Earned Value menjadi indikator waktu dalam metode Earned Schedule. Penelitian ini bertujuan untuk mengetahui apakah metode Earned Schedule layak digunakan untuk memprediksi durasi akhir untuk proyek infrastruktur jalan tol di Indonesia. Penelitian ini dilakukan dengan cara membandingkan rata-rata dua populasi antara rata-rata populasi durasi dengan Earned Schedule dan rata-rata populasi durasi realisasi yang diambil dari kenyataan. Selanjutnya sampel rata-rata populasi tersebut diuji melalui uji hipotesis selisih rata-rata untuk mengetahui apakah kedua sampel tersebut berada dalam satu populasi yang sama. Data yang terkumpul pada penelitian ini adalah sebanyak 7 data kurva-s yang masih dalam proses konstruksi dan 4 data kurva-s yang sudah selesai. Hasilnya, populasi prediksi durasi akhir dengan metode Earned Schedule tidak memiliki selisih rata-rata dengan populasi prediksi durasi akhir realisasi. Dengan demikian, metode Earned Schedule dinilai cukup layak digunakan untuk memprediksi durasi akhir proyek jalan tol di Indonesia.

Kata kunci: *keterlambatan, konstruksi, infrastruktur, jalan tol, Earned Schedule.*

ABSTRACT

The problem of project time duration delays is very common in various construction projects throughout Indonesia. There are many methods developed to overcome this problem, one of which is the Earned Schedule method. This method was developed from the Earned Value method which converts the cost indicator contained in Earned Value into a time indicator in the Earned Schedule method. This study aims to determine whether the Earned Schedule method is feasible to use to predict the final duration for toll road infrastructure projects in Indonesia. This research is conducted by comparing the average of two populations between the average population duration with Earned Schedule and the average population duration realization taken from reality. Furthermore, the population average samples were tested through the mean difference hypothesis test to determine whether the two samples were in the same population. The data collected in this study are 7 s-curve data that are still under construction and 4 s-curve data that have been completed. As a result, the population of predicted final duration with Earned Schedule method has no average difference with the population of predicted final duration of realization. Thus, the Earned Schedule method is considered feasible enough to be used to predict the final duration of toll road projects in Indonesia.

Keywords: *delay, construction, infrastructure, toll road, Earned Schedule*