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TITLE OF DIPLOMA THESIS:

Construction management of Linear Projects, TiLoS Software and Construction Claims due to time extension or project acceleration

AUTHOR: Chronopoulos Georgios

ABSTRACT

The scopes of this Thesis are the scheduling methods of linear projects, TiLoS software and the construction claims due to project time extension or acceleration. The evolution of scheduling methods of linear projects is presented through the main methods as, Lines of Balance (LOB), Linear Scheduling Method (LSM) and finally the Repetitive Scheduling Method (RSM) where the main focus made because of the paradox effect the a.m. method reveals. This Thesis describes the main functions of the TiLoS software, which used for linear projects both horizontal and vertical type as also for projects with repetitive and non-repetitive activities. TiLoS is based on the Linear Scheduling Method (LSM) and due to the fact that this method is mostly graphical, makes the software a powerful project management tool with a dynamic behavior. A presentation also made of the cost evaluation of construction claims because of time extension or acceleration in the construction industry with emphasis in the contract types FIDIC and the method “measured mile”. Further, in the linear projects acceleration can be achieved with time extension of some non critical activities and without deploying additional resources At last the cost impacts of this method analyzed by a case study with TiLoS.

KEYWORDS

Construction Management, Scheduling of Linear Projects, LOB, LSM, RSM, TiLoS, FIDIC, measured mile, construction claims, time extension, project acceleration