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Consequences of Improper Preparation a Work Breakdown Structure (WBS) and Schedule of Civil Projects

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ABSTRACT

If you have classified their future tasks and activities In fact, you also have to manage their own work used the WBS or work breakdown structure. Indeed WBS will allow you to break down tasks into smaller pieces, and in this way also makes it easier for you to track and manage. WBS is an abbreviation of the word "Work Breakdown Structure", Work Breakdown Structure means, and describes the hierarchy and tasks that are grouped under the work packages and they are implemented in a project. WBS proportionate structure of executive work, and it reduces the cost of the project. If we can prepare work breakdown structure and good and real schedule in civil projects, with project requirements and available facilities and by help of experts, it can be said that the project will be completed on time and at a lower cost. The following article has been tried to be told in the simplest way the importance of a work breakdown structure and schedule, and describes the consequences of improper preparation work breakdown structure and schedule in civil projects by help the regulations, circulars and state laws.

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INTRODUCTION

Work breakdown structure is used for the communication field, and project delivery, and all stakeholders of project will be able to see and widespread understand the project and easily project delivery. Every project needs break it down into smaller parts for more control. The smaller pieces are easier to define and allocate specific resources into smaller components. One of the important points when creating the WBS is finally, the activities will end likely with identify all the steps needed to complete the project. Therefore, we must pay their attention instead activities to delivery focus, to give better facilities. Here it should be noted that if the work breakdown structure is important, what are the implications so poorly prepared?

Research Method:

This paper has been prepared and regulated based on experiences in the civil and review, and study of general conditions of treaty and the directives issued by the Technical Office of the Deputy of President Strategic Supervision problems caused by the improper preparation work breakdown structure and schedule of civil projects (projects of capital assets).

Defining Work Breakdown Structure:

Work breakdown structure includes the hierarchy and level by level analysis of project action and generally breaking project overall into details.

The Purpose of the Work Breakdown Structure:

In general objectives of the work breakdown structure can be divided into the following steps:

- 4.1 Overview and easy study of the project
- 4.2 Break tasks into smaller pieces to better understand it
- 4-3 reduce project costs and minimize its run-time
- 4.4 Creating language between employers, contractors, consultants and practitioners of project

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4.5 Preparation of the general plan and detailed schedule (Schedule) of the project by work breakdown structure

The Importance of the Work Breakdown Structure:

It appears work breakdown structure is simple and elementary in civil projects, and why is that contractors, consultants and employers do not attach great importance to details. If it can safely be said that the planning and management in civil projects is based on this principle because after preparing the Work Breakdown Structure project manager can provide schedule of build and run with regard to facilities and equipment, environmental conditions, human resources, budget and cost estimates. It also can be control and if necessary be reformed all operations from the beginning to the end of the project by a good break structure. In general it can be said as architectural drawings, designs and installations have an international and standard unit, schedule and work breakdown structure can be defined as have phrases and words that have been used in the execution unit, which contributed significantly to the various people involved in the project.

WBS Structure and Understand the Need for it:

- 6-1. Start by repeating the vision and goals of the project will focus on the objectives of the project participants.
- 6-2- stages of implementing each of the project is different and you need to find an appropriate level of analysis for your own of the project.
- 6-3- separation percentages should not be too small, so that they are difficult to manage and track.
- 6-4- project team offers a summary and example of WBS about what is closer to the goals of the project.
- 6-5- depending on the size and complexity of the project and to discuss and more identify the appropriate time should be provided to the project team.

The Project Manager and the Tools Needed to Manage the Project:

It is a professional in the field of project management. Project managers are able to take responsibility for planning, executing and closing of any of the project. Project Manager tries to determine and exact implement the needs of the project and based on the knowledge and experience, and he is able to regulated work breakdown structure and schedule the action into different methods. To prepare schedules, critical path analysis and understanding and use of tools and techniques that are commonly known as good practices are not enough alone for project management. The project manager must use at least four areas of knowledge, skill, experience and expertise, and for this, the project team is formed and operate under the supervision of the project manager. For each of the different projects, depending on the type of activity, the project manager can use the various specialties. Psychologists say that our brain cannot understand normally more than 7 to 9 cases simultaneous. Therefore, a project may has dozens or even thousands of tasks over our ability to understand all at once. The solution is to divide tasks among experts.

Publication No. 4311 of President Strategic Deputy Press:

Mentioned publication is related to notification of the agreement, general and personal condition of the treaties and provisions in directive No. 842/54-1088 / 102 dated 03.03.1378 deputy of strategic planning and monitoring, that according to Article 23 of the Law and Finance, administrative regulations and technical and operational systems of country civil projects, agreements, general and personal conditions of contractors and their related regulations are from the first group (binding), and they shall run from the date of notification to the treaties.

Definition of a Detailed and Schedule of Work Implementation According to Article 5 of General:

Condition of contract:

Work and detailed schedule in accordance with Article 5 of the General Conditions of convention as defined in this way:

- A) The total schedule: is a program in which the overall project schedule under the treaty was reflected in terms of month, and it listed in the documents of treaty.
- B) Detailed schedule: it is a program includes scheduling different activities the work of treaty, in detail and in context of the overall schedule.

Review of Legal Laws of General Conditions and Private Treaty on the Schedule:

Section B of Article 18:

The contractor is obligated to provide organization, implementation methods and detailed schedule, according to the consulting engineer based on existing maps and general schedule, and within one month from the date of the exchange the treaty, or other period specified in the treaty documents submitted to the consulting engineer, to after modification and approval by the employer to be delivered to the contractor for run. If in the documents of treaty is determined the details of how to prepare a detailed schedule and update it, contractor is obliged to observe.

Section C of Article 18:

If during the execution of the work, the contractor determines that the changes in the detailed schedule is necessary, he is obliged before the deadline for doing things that he should be changed in the program, report subject to the consulting engineer by providing reasons. Consulting engineer handles the changes demanded by the contractor in terms of the overall schedule, and what is acceptable, he will notified to the contractor after the approval of the employer. Obviously, this change will not reduce the obligations and responsibilities of the contractor in the contents of the treaty. If change detailed schedule is discussed by the consulting engineer, contractor provides detailed schedule changes according to the view's consulting engineer, and as mentioned above, in order to review and approval, submits it to the consulting engineer.

Section D of Article 18:

Contractor shall provide a full report of the work done during that month at the end of each month. Consulting engineer determines the shape and how to report it. This report including the amount and percentage of activity, progress or delay towards a detailed schedule, problems and obstacles, the type and amount of materials and equipment imported into the workshop, the number and types of machines available and ready to work, and the number expertise and manpower and other available necessary information. If more detail is given on how to prepare a progress report in documents and treaties, the contractor is obliged to respect it.

Section E of Article 18:

The contractor is committed to has a version of the program, graphs, and charts the progress in the workshop, and if necessary, consulting engineers and those who are permitted to visit the shop, make use of it.

Section B of article 28:

Employer announces date of delivery the workshop to contractor after exchange treaty that it should not be more than 30 days from the date of the exchange treaty. If delivery workshop is not possible together, the employer must deliver workshops to contract can do the treaty subject according to the detailed schedule.

Section C of Article 28:

If the employer fails to deliver workshops in the order in which the contractor can do the work according to detailed schedule, and time of delay in the delivery of workshops become over a month, employer pays the additional generated costs to the contractor in order to compensate delays in the delivery of the workshop.

Row 3 of Article 30:

Delay in notified agendas and plans included change time of the treaty if the contractor will be asked them form consulting engineer according to the detailed schedule.

Row 4, section A of Article 30:

If delays occur in the delivery of materials to sell them must necessarily be made by the employer transference, it including change duration of the treaty, if the contractor has proceeded in time according to detailed schedule for prepare them.

Row 2, section A of Article 46:

Delay in provide the detailed schedule for more than half of the deadline to submit it is one of the reasons for the termination of the treaty.

Row 5, section A of Article 46:

Delay in the completion of each of the tasks foreseen in the detailed schedule, more than half the time specified for that job is also one of the reasons for the termination of the treaty.

Row 5, section B of Article 50:

If the treaty is terminated pursuant to Article 46 or in accordance with Article 48 be terminated to the treaty, delay in work towards detailed schedule in compliance with investigated Article 30, it was determined the authorized or unauthorized amount. In this case, the remaining amount of work that has been delayed in its implementation is the amount of work that according to detailed schedule, and taking into account the delay allowed by contractor should be was made until the date of end or termination of the treaty, minus the amount of work done.

Problems Arising From the Unrealistic the Work Breakdown Structure and Detailed Schedule:

Here, as described above, and in importance and how to prepare a work breakdown structure and schedule, it can better noted that the problems caused by unrealistic and or downplay it in the civil contracts have been concluded based on the price list or as Fixe (square meters of floor and the total).

First thing in such contracts is preparing a detailed schedule, that in accordance section (b) of Article 18 of the general conditions of the treaty shall offered within one month from the date of the exchange the treaty by the contractor. Legislator explicitly referred to the importance of detailed schedule in most of the legal provisions. Indeed, in many projects, work breakdown structure and schedule have oppressed, and considering that majority of contractors, consultants and employers do not know about the importance and consequences or downplayed it, in preparing and editing it has not paid attention to the use of expert and efficient force, this will lead to delay in project implementation with more cost.

Second point is that it seems work breakdown structure is same in both projects and it has a type map and details in the two geographical areas will be similar, while in this two projects, prepare a schedule due to implementation in two different places and in different seasons can has substantial changes. According to the above description and in short, we refer problems arising from the unrealistic work breakdown structure and detailed schedule:

11-1- paying unrealistic adjustment and the differentials materials during the quarter issue indicators according to schedule.

11-2- delay in completion of the project according to the improper schedule and convert the adjustment ratio 0/975

11-3- mismatch between bill payment and performance of contractors for unreal work breakdown structure.

11-4- inappropriate pay 5/5% of the third installment of the advance payment that it should be paid to the contractor after 30% of the operation bill.

11-5- by reduce or increase the 25% of amount treaty or changes in the values items that do not have a good percentage of the Work Breakdown Structure always make the difference between the contractor and the employer.

11-6- In the event of cancellation or termination of the treaty, breakdown structure will has crucial role in the defeat statements of the contractor.

The Results and Presenting Some Strategies:

At the end of the article should be said that the work breakdown structure and consequently schedule have crucial and decisive role in accelerating the process of implementing civil projects. We can solve project implementation problems resulting from the provision of building materials, manpower, machinery, etc., and they are causing project delay by correct and efficient management and use of expertise in project management. Consultant in coordination with the employer must give importance to develop a work breakdown structure and schedule of projects, and have a unit that has high ability as the project control unit to can monitor physical progress of project weekly and monthly, and, if necessary, and in coordination with the contractor he modifies and edits the schedule to projects have not to be delayed due to the lack of program. Contractor is obliged to provide the schedule confirmed by the employer according to the general convention of treaty. Contractor shall prepare the proposed program according to the standards and by use the update soft wares and as applied and accordance with the operating conditions for each zone, so that the operation of the projects done purposefully, and in the best way.

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