

PPM

The Projects Progress Monitoring tool

User Guide



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“PPM – the Projects Progress Monitoring tool” is a tool in MS Excel to assist in managing a **single project with up to 500 activities**.

1 Introduction

“PPM – the Projects Progress Monitoring tool” is a tool developed in MS Excel to assist in managing a single project with up to 500 activities. It is providing a picture of the monthly progress of our project, as per the annual budget distributes, as also the progress from the start till current month.

The language used is English, but reports are also produced in Arabic. The Arabic language can be replaced through another language, by modifying the sheet "Phrases"

PPM produces the following statistics:

- (A) General Statistics,
- (B) Project Duration statistics
- (C) statistics related to the Contract Value
- (D) Project Key Performance Indicators.

It produces automatically text reports about current progress.

It presents graphs covering the whole project (all years) as also the annual performance.

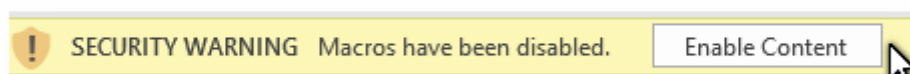
It produces the monthly payment certificates (some details e.g. advance payment, retention, penalties need to be manual inserted).

The excel file can be modified by using the password: “tzndgrlt”.

2 Installation

The PPM is developed in MS Excel, and uses macros to execute the tasks as will be presented.

1. Copy the file “2017-12-11 PROJECT MONITORING V1.xlsm” to your computer and open it.
2. If you will get a security warning, select “Enable content”




3 The structure of the PPM

3.1 The MENU

PPM - Project Progress Monitoring Tool

Version 1 /01-01-2018

Current Month: June 2020 يونيو 2020	
Input	<p>Project Details General information about the project and project details to be entered.</p> <hr/> <p>Quantities Budget Quantities and Unit Prices of all activities of initial contract and V.O. to be entered. The initial contract value, as also the contract values of the V.O.s and the current total contract value (without contingencies) is calculated.</p> <hr/> <p>Physical Progress Quantities executed every month to be entered.</p> <hr/> <p>Actual vs. Planned Value of activities planned per month to be entered. The actual progress vs. the planned project is calculated, as also the SPI (Schedule Performance Index)</p> <hr/> <p>Equipment used In case of truck roads, the equipment used every month to be entered.</p>
	<p>Progress Monitoring The monthly progress of our project is presented, as per the annual budget distributes, as also the progress from the start till current month.</p> <hr/> <p>Statistics It presents statistics regarding (A) General Statistics, (B) Project Duration, (C) Contract Value and (D) Project Performance.</p> <hr/> <p>Report It presents a text report about current progress.</p> <hr/> <p>Graphs It presents graphs covering the whole project (all years) as also the annual performance.</p> <hr/> <p>Payment Certificates It produces the monthly payment certificates (some details e.g. advance payment, retention, penalties need to be manual inserted).</p>
	<p> PRINT Report طباعة (عربي) full report (English or Arabic), including</p>
	<p>PRINT Statistics PRINT Progress the Statistics and the Progress Monitoring (English)</p>

All “buttons” in the menu are guiding you to the relevant sheets. By pushing the print buttons, you can print the report and the statistics in the Arabic or English version.

3.2 Data Input

For the input of the necessary project data sheets presented next and coloured in blue, to be used.

In the input sheets, there are some calculations executed, based on the input data's, to be used in other sheets.

Overview

Input	Project Details	General information about the project and project details to be entered.
	Quantities Budget	Quantities and Unit Prices of all activities of initial contract and V.O. to be entered. The initial contract value, as also the contract values of the V.O.s and <u>the current total contract value (without contingencies) is calculated.</u>
	Physical Progress	Quantities executed every month to be entered.
	Actual vs. Planned	Value of activities planned per month to be entered. The actual progress vs. the planned project is calculated, as also the SPI (Schedule Performance Index)
	Equipment used	In case of truck roads, the equipment used every month to be entered.

Sheet "PROJECT DETAILS"

Enter here general information about the project as also project details.

Please note that the contract duration incl. any time extension cannot exceed seven years.

Project title	<i>Provide the project title in English and Arabic.</i>
Contractor and Supervising Consultant	<i>Give the name of the Contractor and of the Supervising Consultant</i>
Original and current time-schedule (V.O. to be included)	<i>Provide the project start date and the original duration.</i>
Original and current budget (V.O. to be included)	<i>Enter the original contract value, as also the V.O. (up to four V.O.)</i>
Annual budget distribution	<i>You can define a dedicated % of the budget to be used in a certain year. This % is used for the allocation of the annual budget of each one activity.</i>
Annual contingencies distribution	<i>You can define the % of the contingencies of initial contract value, as also per V.O.</i>

The current contract value will be calculated.

If not all contingencies are distributed, the tool calculates the remaining (not allocated) contingencies.

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
	03-2016 till 02-2017	03-2017 till 02-2018	03-2018 till 02-2019	03-2019 till 02-2020	03-2020 till 02-2021
Annual distribution % of initial Contract Value:	10%	15%	25%	30%	20%
Cummulative:	10%	25%	50%	80%	100%
Annual distribution amount of initial Contract Value:	1,638,156.50	2,457,234.75	4,095,391.25	4,914,469.50	3,276,313.00
Contingencies % of annual distribution:	10%	15%	25%	20%	15%
Cummulative:	10%	25%	50%	70%	85%
Contingencies amount of annual distribution:	186,309.40	279,464.10	465,773.51	372,618.81	279,464.10
Variation Orders (V.O.)	0.00	0.00	0.00	0.00	0.00
Total Contract Value with contingencies:	1,824,465.90	2,736,698.85	4,561,164.76	5,287,088.31	3,555,777.10
Cummulative:	1,824,465.90	4,561,164.76	9,122,329.51	14,409,417.82	17,965,194.92

Remaining (not allocated) contingencies:

2,257,854.95

Saving or overspending of the annual budget distribution:

The tool allows to transfer a certain % of savings from year X to the next year X+1.

If we have overspending for a certain year, you can define a % to be deducted from next year's budget.

(this is related to the whole budget – all activities).

Progress alerts:

you can set two alert levels that will provide warning of danger to exceed the annual budget of an activity (1st level) or already exceeded the available annual budget of an activity (2nd level):

- 1st alert level: if the annual budget of an activity exceeds a certain % specified, the cell in the sheet "PROGRESS MONITORING" will become orange brown
- 2nd alert level: if the annual budget of an activity exceeds a certain % specified, the cell in the sheet "PROGRESS MONITORING" will become red

The tool calculates the current contract value incl. contingencies, the initial completion date, the new completion dates as per the V.O.s issued and the revised (new) contract duration.

Sheet “QUANTITIES-BUDGET”

Quantities and Unit Prices of all activities of initial contract and V.O. to be entered.

The initial contract value, as also the contract values of the V.O.s and the current total contract value (without contingencies) is calculated at activity level.

Sheet “PHYSICAL PROGRESS”

In this sheet, the actual progress per month is registered:

- In the left part of the sheet automatically all activities and their quantity as per the contract and any V.O. are provided (at activity base).
- Per month the quantities executed per activity has to be registered. The PPM calculates the total quantity of every activity till now, as also the remaining quantities.
- Also the number of work orders per month to be entered,

Sheet “ACTUAL vs. PLANNED”

In this sheet, the actual progress versus the planned progress is presented.

As per the time schedule provided by the contractor at the project start, the planned spending per month can be calculated. This information, the planned spending per month, has to be registered in this sheet.

The sheet provides a lot of calculations: the Earned Value (EV) is calculated every month, as also the Schedule Performance Index (SPI). If the $SPI < 1$, we are in delay, and the value is indicated in red colour, otherwise in green colour.

Sheet “EQUIPMENT”

In this sheet, the machineries used per month will be registered.

3.3 Outputs – Reports – Statistics

Output	Progress Monitoring	The monthly progress of our project is presented, as per the annual budget distributes, as also the progress from the start till current month.
	Statistics	It presents statistics regarding (A) General Statistics, (B) Project Duration, (C) Contract Value and (D) Project Performance.
	Report	It presents a text report about current progress.
	Graphs	It presents graphs covering the whole project (all years) as also the annual performance.
	Payment Certificates	It produces the monthly payment certificates (some details e.g. advance payment, retention, penalties need to be manual inserted).

The sheets “PROGRESS MONITORING”, “STATISTICS”, “REPORT”, “GRAPHS-Arabic”, “GRAPHS-English” are produced automatically.

The reports are prepared automatically in Arabic and English.

The sheet “PAYMENT CERTIFICATES” produces the monthly payment certificate, but following info has to be registered:

- Material at Site Advance Payment
- Penalties amount
- Retention
- Recovery of Advance Payment
- Amount of Penalties
- Other Deduction
- Release 50% of Retention Money
- Release 50% of Retention Money