## Monitoring via EVM

Task ID	Activity	Pred.	Duration (months)	Budget (K\$)	Progress	AC
1	Preparation		2	600	100%	600
2	Design	1	3	1200	100%	1400
3	Implementation	2	2	400	50%	200
4	Testing	2	3	1200	33.3%	500
5	Deployment	4	3	300	0%	0

Note: the project started 7 months ago.

Q1: until now you're over / under budget ?

According to the previous data the total budget is 3700 K\$ and the cost until now is 2700 K\$ so we're under budget.

Q2: we're late or not?

The total estimated duration for the project is 11 months and until now 7 months ended and still 50% of task 3, 66.7% of task 4 and 100% of task 5 hasn't finished yet so we're 1 month above the estimated duration.

Q3: continue with this pace we will be under/over budget at the end of the project?

If we continue with this pace we need 200 K\$ to finish the 50% of task 3 and 1001 K\$ to finish the rest of task 4 and 300 K\$ for task 5 so we need 1501 K\$ and we have just 1000 K\$ ( 3700 K\$ total estimated budget – 2700 K\$ spent until now) so we will be over the estimated budget by 501 K\$.

• **Schedule Variance (SV):** Schedule Variance shows the difference between where we planned to be and where we are actually in the schedule

$$SV = EV - PV = 2400 \text{ K} - 3000 \text{ K} = -600 \text{ K}$$

• Schedule Performance Index (SPI): Schedule Performance Index shows the rate at which the project performance is meeting schedule expectations up to a certain point in time

$$SPI = EV / PV = 2400 K\$ / 3000 K\$ = 0.8$$

• Cost Variance (CV): Cost Variance is the difference between what was planned to spend, and what was actually spend

$$CV = EV - AC = 2400 \text{ K} - 2700 \text{ K} = -300 \text{ K}$$

• Cost Performance Index (CPI): Cost Performance Index is the rate at which project performance is meeting planned costs during a specific period of time.

$$CPI = EV / AC = 2400 K\$ / 2700 K\$ = 0.889$$

• Estimate at Completion (EAC): Estimated at Competition shows the expected total cost when completing all tasks