S-Curve of Works Progress: Planned Percentage compared with Achieved Percentage

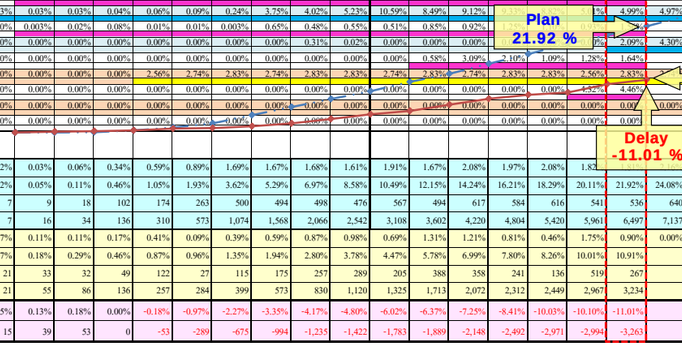
Construction of Mass Transit System Project in Bangkok (Red Line) (I)

Contract 1: Civil Works for Bang Sue Grand Station and Depots

BILL NO	DESCRIPTION	CONTRACT AMOUNT (Baht)	CONTRACT AMOUNT (%)	Cumulative Progress (%)		Diff (%)	2013 Mar13	Apr13	May13	Jun13	Jul13	Aug13	Sep13	Oct13	Nov13	Dec13
							1	2	3	4	5	6	7	8	9	10
							31	59	90	120	151	182	212	243	273	304
1	GENERAL WORKS	266,482,434	0.90%	Planed	35.76%	13.68%	1.94%	2.08%	2.15%	2.08%	2.15%	2.15%	2.08%	2.15%	2.08%	2.15%
				Actual	49.44%		8.05%	11.84%	5.62%	3.92%	1.68%	1.50%	1.74%	1.65%	2.36%	1.36%
2	ELEVATED STRUCTURE	11,422,571,521	38.54%	Planed	13.77%	-8.83%	0.00%	0.03%	0.05%	0.08%	0.42%	0.51%	1.70%	1.13%	1.06%	1.13%
				Actual	4.95%		0.00%	0.00%	0.13%	0.12%	0.13%	0.14%	0.15%	0.07%	0.24%	0.10%
	2.1 Elevated railway	11,244,557,895	37.94%	Planed	13.12%	-8.62%	0.00%	0.02%	0.05%	0.08%	0.42%	0.51%	1.72%	1.15%	1.01%	1.03%
				Actual	4.50%		0.00%	0.001%	0.13%	0.12%	0.13%	0.15%	0.15%	0.07%	0.17%	0.10%
	2.2 At-grade and transition railway	178,013,626	0.60%	Planed	54.96%	-22.24%	0.18%	0.19%	0.20%	0.19%	0.20%	0.20%	0.19%	0.20%	4.29%	7.47%
				Actual	32.72%		0.00%	0.00%	0.00%	0.00%	0.09%	0.00%	0.10%	0.00%	4.97%	0.39%
3	STATION	14,247,067,853	48.07%	Planed	20.11%	-4.15%	0.01%	0.00%	0.04%	0.49%	0.58%	1.06%	1.70%	1.78%	1.70%	1.40%
				Actual	15.95%		0.00%	0.01%	0.01%	0.17%	0.73%	0.03%	0.65%	1.08%	1.52%	1.87%
	3.1 Bang Sue Station	13,388,098,271	45.17%	Planed	20.53%	-3.55%	0.01%	0.00%	0.04%	0.52%	0.62%	1.13%	1.80%	1.89%	1.74%	1.41%
				Actual	16.98%		0.00%	0.01%	0.01%	0.18%	0.78%	0.04%	0.69%	1.14%	1.62%	1.99%
	3.2 Chatuchak station	858,969,582	2.90%	Planed	13.53%	-13.53%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.04%	1.13%	1.29%
				Actual	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
4	DEPOTS	1,604,023,818	5.41%	Planed	54.96%	-50.05%	0.00%	0.00%	0.00%	1.07%	1.25%	1.81%	2.35%	2.64%	3.80%	3.77%
				Actual	4.91%		0.00%	0.01%	0.00%	0.01%	0.00%	0.00%	0.02%	0.05%	0.06%	0.05%
	4.1 LD-train depot	821,073,432	2.77%	Planed	92.13%	-86.88%	0.00%	0.00%	0.00%	2.08%	2.45%	3.53%	4.11%	4.75%	7.40%	7.34%
				Actual	5.25%		0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.04%	0.08%	0.06%	0.001%
	4.2 CT-train depot	782,950,386	2.64%	Planed	15.97%	-11.42%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.50%	0.42%	0.03%	0.03%
				Actual	4.55%		0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.01%	0.05%	0.09%
5	LOCAL ROAD AND ROAD FLYOVER	1,410,141,074	4.76%	Planed	59.66%	-50.62%	0.02%	0.03%	0.03%	0.03%	0.05%	0.08%	0.20%	3.18%	3.46%	4.44%
				Actual	9.05%		0.00%	0.003%	0.02%	0.07%	0.01%	0.01%	0.003%	0.55%	0.41%	0.47%
	5.1 Local road	1,196,569,730	4.04%	Planed	69.88%	-60.96%	0.03%	0.03%	0.03%	0.04%	0.06%	0.09%	0.24%	3.75%	4.02%	5.23%
				Actual	8.92%		0.00%	0.003%	0.02%	0.08%	0.01%	0.01%	0.003%	0.65%	0.48%	0.55%
	5.2 Road flyover	213,571,344	0.72%	Planed	2.42%	7.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.31%	0.02%
				Actual	9.77%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6	PROVISIONAL SUMS AND PROVISIONAL ITEMS	672,130,000	2.27%	Planed	35.89%	-27.11%	0.00%	0.00%	0.00%	0.00%	2.56%	2.74%	2.83%	2.74%	2.83%	2.83%
				Actual	8.78%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
7	DAYWORK SCHEDULE	17,823,300	0.06%	Planed	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
				Actual	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	SUM	29,640,240,000	100.00%													
Plan	% Progress of Works						0.02%	0.03%	0.06%	0.34%	0.59%	0.89%	1.69%	1.67%	1.68%	1.61%
	% Accumulative Progress of works						0.02%	0.05%	0.11%	0.46%	1.05%	1.93%	3.62%	5.29%	6.97%	8.58%
	Total Amount (MB)						7	9	18	102	174	263	500	494	498	476
	Accumulative Total Amount (MB)						7	16	34	136	310	573	1,074	1,568	2,066	2,542
Actual	% Progress of Works						0.07%	0.11%	0.11%	0.17%	0.41%	0.09%	0.39%	0.59%	0.87%	0.98%
	% Accumulative Progress of works						0.07%	0.18%	0.29%	0.46%	0.87%	0.96%	1.35%	1.94%	2.80%	3.78%
	Total Amount (MB)						21	33	32	49	122	27	115	175	257	289
	Accumulative Total Amount (MB)						21	55	86	136	257	284	399	573	830	1,120
Cumulative Progress Difference in % against Planing							0.05%	0.13%	0.18%	0.00%	-0.18%	-0.97%	-2.27%	-3.35%	-4.17%	-4.80%
Cumulative Progress Difference in (MB) % against Planing							15	39	53	0	-53	-289	-675	-994	-1,235	-1,422

BILL NO	DESCRIPTION	2014 Jan14	Feb14	Mar14	Apr14	May14	Jun14	Jul14	Aug14	Sep14	Oct14	Nov14	Dec14
		11	12	13	14	15	16	17	18	19	20	21	22
		335	363	394	422	453	483	514	545	575	606	636	667
1	GENERAL WORKS	2.15%	1.94%	2.15%	2.08%	2.15%	2.08%	2.15%	2.15%	2.08%	2.15%	2.08%	2.15%
		1.35%	1.35%	1.56%	1.36%	1.36%	1.36%	1.36%					
2	ELEVATED STRUCTURE	1.22%	1.07%	1.18%	1.02%	0.95%	0.98%	1.24%	2.45%	2.44%	2.57%	1.49%	1.71%
		0.07%	0.16%	0.41%	0.36%	0.43%	1.94%	0.49%					
	2.1 Elevated railway	1.15%	1.02%	1.10%	0.94%	0.85%	0.89%	1.18%	2.44%	2.43%	2.56%	1.45%	1.68%
		0.06%	0.11%	0.25%	0.24%	0.40%	1.97%	0.46%					
	2.2 At-grade and transition railway	5.46%	4.69%	6.37%	6.32%	6.77%	6.60%	5.42%	3.46%	2.77%	3.20%	3.48%	3.45%
		0.33%	3.29%	10.78%	7.66%	2.14%	0.31%	2.68%					
3	STATION	1.39%	1.08%	1.71%	1.68%	1.95%	1.84%	1.70%	1.47%	1.23%	0.72%	0.57%	0.47%
		1.31%	2.48%	1.97%	1.14%	0.41%	1.62%	0.94%					
	3.1 Bang Sue Station	1.39%	1.06%	1.72%	1.69%	1.97%	1.86%	1.70%	1.45%	1.23%	0.74%	0.57%	0.43%
		1.40%	2.64%	2.10%	1.22%	0.44%	1.73%	1.00%					
	3.2 Chatuchak station	1.29%	1.49%	1.69%	1.59%	1.67%	1.63%	1.69%	1.85%	1.13%	0.40%	0.61%	1.09%
		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					
4	DEPOTS	4.92%	5.70%	6.53%	5.74%	6.23%	5.19%	3.96%	3.57%	4.22%	4.00%	3.28%	4.79%
		0.09%	0.12%	0.58%	0.88%	0.61%	1.17%	1.26%					
	4.1 LD-train depot	8.69%	9.96%	10.77%	9.59%	9.59%	7.05%	4.82%	1.96%	1.60%	0.62%	0.65%	1.29%
		0.00%	0.02%	0.54%	1.04%	0.60%	1.66%	1.18%					
	4.2 CT-train depot	0.97%	1.24%	2.08%	1.69%	2.71%	3.24%	3.05%	5.25%	6.96%	7.54%	6.04%	8.47%
		0.18%	0.23%	0.62%	0.71%	0.62%	0.66%	1.35%					
5	LOCAL ROAD AND ROAD FLYOVER	8.99%	7.21%	7.74%	7.92%	7.49%	4.25%	4.55%	4.87%	4.71%	5.01%	2.64%	4.04%
		0.43%	0.81%	1.24%	1.37%	1.10%	0.99%	1.57%					
	5.1 Local road	10.59%	8.49%	9.12%	9.33%	8.71%	5.11%	4.99%	4.97%	4.40%	4.26%	0.80%	2.11%
		0.51%	0.85%	0.92%	1.13%	0.92%	0.96%	2.06%					
	5.2 Road flyover	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.09%	4.30%	6.43%	9.22%	12.93%	14.84%
		0.00%	0.58%	3.09%	2.10%	1.09%	1.28%	1.64%					
6	PROVISIONAL SUMS AND PROVISIONAL ITEMS	2.74%	2.83%	2.74%	2.83%	2.83%	2.56%	2.83%	2.74%	2.83%	2.74%	2.83%	2.83%
		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	4.46%					
7	DAYWORK SCHEDULE	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%					
	SUM												
Plan	% Progress of Works	1.91%	1.67%	2.08%	1.97%	2.08%	1.83%			2.06%	1.87%	1.23%	1.42%
	% Accumulative Progress of works	10.49%	12.15%	14.24%	16.21%	18.29%	20.11%	21.92%	24.08%	26.14%	28.02%	29.25%	30.67%
	Total Amount (MB)	567	494	617	584	616	541	536	640	612	555	365	421
	Accumulative Total Amount (MB)	3,108	3,602	4,220	4,804	5,420	5,961	6,497	7,137	7,749	8,304	8,670	9,090
Actual	% Progress of Works	0.69%	1.31%	1.21%	0.81%	0.46%	1.75%	0.90%	0.00%	0.00%	0.00%	0.00%	0.00%
	% Accumulative Progress of works	4.47%	5.78%	6.99%	7.80%	8.26%	10.01%	10.91%					
	Total Amount (MB)	205	388	358	241	136	519	267					
	Accumulative Total Amount (MB)	1,325	1,713	2,072	2,312	2,449	2,967	3,234					
Cumulative Progress Difference in % against Planing		-6.02%	-6.37%	-7.25%	-8.41%	-10.03%	-10.10%	-11.01%					
Cumulative Progress Difference in (MB) % against Planing		-1,783	-1,889	-2,148	-2,492	-2,971	-2,994	-3,263					

BILL NO	DESCRIPTION	2015 Jan15	Feb15	Mar15	Feb15	May15	Jun15	Jul15	Aug15	Sep15	Oct15	Nov15	Dec15
		23	24	25	26	27	28	29	30	31	32	33	34
		698	726	757	785	816	846	877	908	938	969	999	1030
1	GENERAL WORKS	2.15%	1.94%	2.15%	2.08%	2.15%	2.08%	2.15%	2.15%	2.08%	2.15%	2.08%	2.15%
2	ELEVATED STRUCTURE	3.22%	3.05%	2.84%	3.28%	3.70%	3.11%	3.11%	3.11%	3.20%	3.69%	3.77%	3.62%
	2.1 Elevated railway	3.22%	3.04%	2.83%	3.28%	3.70%	3.10%	3.12%	3.14%	3.24%	3.74%	3.82%	3.67%
	2.2 At-grade and transition railway	3.57%	3.32%	3.68%	3.22%	3.57%	3.56%	2.64%	1.26%	0.60%	0.26%	0.19%	0.20%
3	STATION	0.46%	0.56%	1.58%	1.67%	2.45%	2.66%	3.06%	2.89%	3.02%	3.20%	3.09%	2.80%
	3.1 Bang Sue Station	0.42%	0.53%	1.60%	1.60%	2.35%	2.58%	3.02%	2.91%	3.03%	3.17%	3.06%	2.89%
	3.2 Chatuchak station	1.13%	1.06%	1.17%	2.86%	4.04%	3.78%	3.71%	2.62%	2.83%	3.73%	3.51%	1.49%
4	DEPOTS	4.81%	2.37%	2.33%	1.64%	2.45%	1.94%	1.64%	1.49%	1.48%	1.39%	0.77%	0.43%
	4.1 LD-train depot	1.24%	0.47%	0.03%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	4.2 CT-train depot	8.55%	4.37%	4.73%	3.35%	5.01%	3.98%	3.37%	3.05%	3.03%	2.84%	1.58%	0.87%
5	LOCAL ROAD AND ROAD FLYOVER	6.23%	4.09%	2.30%	1.82%	1.45%	2.01%	1.68%	0.03%	0.03%	0.03%	0.03%	0.03%
	5.1 Local road	3.14%	2.57%	0.68%	0.98%	1.30%	2.36%	1.97%	0.03%	0.03%	0.03%	0.03%	0.03%
	5.2 Road flyover	16.92%	12.60%	11.38%	6.57%	2.32%	0.07%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6	PROVISIONAL SUMS AND PROVISIONAL ITEMS	2.74%	2.83%	2.74%	2.83%	2.83%	2.56%	2.83%	2.74%	2.83%	2.74%	2.83%	2.83%
7	DAYWORK SCHEDULE	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%
	SUM												
Plan	% Progress of Works	2.05%	1.85%	2.17%	2.33%	2.89%	2.75%	2.92%	2.76%	2.85%	3.12%	3.06%	2.85%
	% Accumulative Progress of works	32.72%	34.58%	36.75%	39.08%	41.97%	44.73%	47.65%	50.41%	53.25%	56.37%	59.44%	62.29%
	Total Amount (MB)	609	549	644	691	858	816	866	817	844	925	908	845
	Accumulative Total Amount (MB)	9,699	10,248	10,892	11,583	12,441	13,257	14,124	14,940	15,785	16,709	17,618	18,463
Actual	% Progress of Works												
	% Accumulative Progress of works												
	Total Amount (MB)												
	Accumulative Total Amount (MB)												
Cumulative Progress Difference in % against Planing													
Cumulative Progress Difference in (MB) % against Planing													

BILL NO	DESCRIPTION	2016 Jan16	Feb16	Mar16	Feb16	May16	Jun16	Jul16	Aug16	Sep16	Oct16	Nov16	Dec16
		35	36	37	38	39	40	41	42	43	44	45	46
		1061	1089	1120	1148	1179	1209	1240	1271	1301	1332	1362	1393
1	GENERAL WORKS	2.15%	2.01%	2.15%	2.08%	2.15%	2.08%	2.15%	2.15%	2.08%	2.15%	2.08%	2.15%
2	ELEVATED STRUCTURE	3.36%	2.99%	2.88%	2.82%	3.19%	3.06%	3.21%	3.25%	3.02%	2.73%	2.25%	1.89%
	2.1 Elevated railway	3.41%	3.04%	2.92%	2.86%	3.24%	3.10%	3.26%	3.30%	3.07%	2.77%	2.29%	1.91%
	2.2 At-grade and transition railway	0.20%	0.19%	0.20%	0.19%	0.20%	0.19%	0.20%	0.20%	0.19%	0.20%	0.19%	0.20%
3	STATION	3.27%	3.04%	2.38%	2.36%	2.21%	2.66%	4.60%	5.51%	5.25%	5.78%	5.18%	3.94%
	3.1 Bang Sue Station	3.34%	3.08%	2.40%	2.39%	2.20%	2.38%	4.74%	5.74%	5.10%	5.64%	5.21%	4.00%
	3.2 Chatuchak station	2.21%	2.50%	2.01%	1.83%	2.32%	7.08%	2.55%	1.98%	7.49%	7.99%	4.66%	2.97%
4	DEPOTS	0.49%	0.32%	0.35%	0.22%	0.24%	0.23%	0.41%	0.22%	0.00%	0.00%	0.00%	0.00%
	4.1 LD-train depot	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	4.2 CT-train depot	1.01%	0.65%	0.72%	0.44%	0.49%	0.46%	0.83%	0.45%	0.00%	0.00%	0.00%	0.00%
5	LOCAL ROAD AND ROAD FLYOVER	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%
	5.1 Local road	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%
	5.2 Road flyover	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
6	PROVISIONAL SUMS AND PROVISIONAL ITEMS	2.74%	2.83%	2.74%	2.83%	2.83%	2.65%	0.18%	0.00%	0.00%	0.00%	0.00%	0.00%
7	DAYWORK SCHEDULE	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%	3.85%
	SUM												
Plan	% Progress of Works	2.98%	2.72%	2.36%	2.32%	2.39%	2.55%	3.50%	3.94%	3.71%	3.86%	3.38%	2.64%
	% Accumulative Progress of works	65.27%	67.99%	70.34%	72.66%	75.05%	77.61%	81.11%	85.04%	88.75%	92.61%	95.99%	98.63%
	Total Amount (MB)	883	806	699	687	709	756	1,038	1,167	1,099	1,143	1,001	784
	Accumulative Total Amount (MB)	19,345	20,151	20,850	21,537	22,246	23,003	24,040	25,207	26,307	27,450	28,451	29,234
Actual	% Progress of Works												
	% Accumulative Progress of works												
	Total Amount (MB)												
	Accumulative Total Amount (MB)												
Cumulative Progress Difference in % against Planing													
Cumulative Progress Difference in (MB) % against Planing													

BILL NO	DESCRIPTION	2017 Jan17	Feb17
		47	48
		1424	1440
1	GENERAL WORKS	2.15%	0.69%
2	ELEVATED STRUCTURE	1.09%	0.13%
	2.1 Elevated railway	1.10%	0.13%
	2.2 At-grade and transition railway	0.20%	0.06%
3	STATION	1.77%	0.04%
	3.1 Bang Sue Station	1.65%	0.02%
	3.2 Chatuchak station	3.50%	0.38%
4	DEPOTS	0.00%	0.00%
	4.1 LD-train depot	0.00%	0.00%
	4.2 CT-train depot	0.00%	0.00%
5	LOCAL ROAD AND ROAD FLYOVER	0.03%	0.01%
	5.1 Local road	0.03%	0.01%
	5.2 Road flyover	0.00%	0.00%
6	PROVISIONAL SUMS AND PROVISIONAL ITEMS	0.00%	0.00%
7	DAYWORK SCHEDULE	3.85%	3.85%
	SUM		
Plan	% Progress of Works	1.29%	0.08%
	% Accumulative Progress of works	99.92%	100.00%
	Total Amount (MB)	382	24
	Accumulative Total Amount (MB)	29,617	29,640
Actual	% Progress of Works		
	% Accumulative Progress of works		
	Total Amount (MB)		
	Accumulative Total Amount (MB)		
Cumulative Progress Difference in % against Planing			
Cumulative Progress Difference in (MB) % against Planing