

ENGINEUITY TUTORIAL



Early Completion Bonus



Early Completion Bonus

The client pays a **bonus for early completion** of a job.

Early completion of a job means completing **at least one period** before the end of the planned duration e.g., if the planned duration is 4 periods, it must be completed in 3 periods or less to obtain the client bonus.



Early Completion Bonus

Client information

Navigate to "Main menu/Industry information/Client information"

[ALL]

[ALL]

Name	Base country	Type	Current relationship	Procurement restrictions		Payment terms		
				From period	Minimum relationship required to continue bidding	Retention	Late completion penalty	Early completion bonus
AeroPower	United States	Private sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
Al Mahran Developments	United Arab Emirates	Private sector	satisfactory		no restriction	1.0 %	1.2 %	0.5 %
American Steel Corporation	United States	Private sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
Amrail	United States	Public sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
ANZ Water	New Zealand	Private sector	satisfactory		no restriction	1.2 %	1.3 %	0.6 %
Auckland City Developments	New Zealand	Private sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
Australian Sport Institute	Australia	Public sector	satisfactory		no restriction	1.0 %	1.2 %	0.5 %
AustRoads	Australia	Public sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
Beijing Development Group	China	Public sector	satisfactory		no restriction	1.0 %	1.3 %	0.5 %
Breeze Energy	United Kingdom	Private sector	satisfactory		no restriction	1.4 %	1.6 %	0.7 %
Cane and Beet Sugars	United Kingdom	Private sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
Chicago City Developments	United States	Public sector	satisfactory		no restriction	1.0 %	1.2 %	0.5 %
Crawford Petrochemicals UK	United Kingdom	Private sector	satisfactory		no restriction	1.4 %	1.6 %	0.9 %
Dales Water Services	United Kingdom	Public sector	satisfactory		no restriction	1.2 %	1.3 %	0.6 %
Devon and Cornwall Water	United Kingdom	Public sector	No relationship		no restriction	1.2 %	1.3 %	0.6 %
Doha Development Group	Qatar	Private sector	satisfactory		no restriction	1.0 %	1.2 %	0.5 %
Dubai Holdings Plc	United Arab Emirates	Private sector	satisfactory		no restriction	1.0 %	1.2 %	0.5 %
East Coast Rebuild	United States	Public sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
East Midlands County Council	United Kingdom	Public sector	satisfactory		no restriction	0.8 %	1.0 %	0.4 %
Electragen	United Kingdom	Public sector	No relationship		no restriction	1.4 %	1.6 %	0.7 %
Emirates Energy	United Arab Emirates	Private sector	satisfactory		no restriction	1.4 %	1.7 %	0.9 %
English Waterways	United Kingdom	Public sector	satisfactory		no restriction	1.2 %	1.2 %	0.5 %
Fenlands County Council	United Kingdom	Public sector	poor		no restriction	1.0 %	1.0 %	0.4 %
FIFA North America 2026	United States	Public sector	fairly good		no restriction	1.0 %	1.6 %	0.7 %
First Wind USA	United States	Public sector	satisfactory		no restriction	1.4 %	1.6 %	0.8 %

AEROPOWER

AeroPower is a US-based aerospace manufacturer with global service operations, and is a subsidiary of United Technologies Corporation. Its headquarters are in Houston, Texas. The company's jet engines are widely used in both civil and military aviation.

As a result of its global operations, the company enters into ventures with all of these countries. The company's early completion bonuses vary by client, and are expressed as a percentage of the tender value (bid entered) for the job.

KEY POINTS

The variation by client of early completion bonuses can affect the company's marketing strategy in deciding upon which sectors/jobs to target.



Early Completion Bonus

Job performance

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance"

Management consultant report Graphical analysis

ALL JOBS IDENTIFIED

JOBS WON

Summary

Risk analysis (Cost)
Risk analysis (Delays)
Retention analysis

TERMINOLOGY

[Completion Ratio] Measure of how efficiently a job is completed in its final period based upon the labour allocated (0=worse possible; 1 is perfect)

Job	In	Type	Size	Sector	Client	Status	Completion details			Progress details			
							In period	Schedule	Ratio	Periods Run	Cost incurred	Profit made	Profit % of cost
4	UK	DB	Medium	Building & Commercial	Madison Bank	Completed early	4	Early	0.97	2	9,185,998	686,861	7.5 %
5	UK	BO	Small	Transport	East Midlands County Council	Completed on time	4	On Time	0.96	2	2,099,767	67,147	3.2 %
29	UK	BO	Small	Transport	HS Rail Connection Group	Completed late	6	Late	0.37	3	1,332,505	-27,741	-2.1 %
32	US	BO	Small	Building & Commercial	FIFA North America 2026	Completed on time	5	On Time	0.96	2	5,768,797	36,079	0.6 %
34	UK	BO	Small	Energy	Breeze Energy	Completed on time	6	On Time	0.94	3	5,240,331	210,539	4.0 %
49	UK	BO	Small	Water & Sewage	English Waterways	Completed on time	6	On Time	0.98	2	1,624,010	72,299	4.5 %
52	UK	BO	Medium	Transport	HS Rail Connection Group	Completed on time	7	On Time	0.93	3	7,310,838	422,006	5.8 %
67	SYR	BO	Small	Energy	Syrian Pipelines	Completed on time	7	On Time	0.81	3	2,592,765	98,570	3.8 %
75	UK	BO	Small	Water & Sewage	Fenlands County Council	Completed late	8	Late	0.37	3	4,979,173	40,220	0.8 %
82	IRQ	DB	Medium	Building & Commercial	Iraq TranGen 2009	Completed on time	8	On Time	0.92	3	9,520,311	458,609	4.8 %
110	UAE	BO	Medium	Energy	Emirates Energy	In progress				2	8,716,389	732,417	8.4 %
118	UK	BO	Medium	Building & Commercial	Master Brewers UK	In progress				2	4,244,370	282,480	6.7 %
128	UK	BO	Small	Water & Sewage	Dales Water Services	Completed on time	8	On Time	0.96	2	2,096,243	76,554	3.7 %
137	UK	BO	Medium	Water & Sewage	The Environment Department	In progress				1	3,104,954	-51,329	-1.7 %
167	US	BO	Medium	Energy	First Wind USA	In progress							
181	UK	BO	Small	Water & Sewage	London Water Services	In progress							

Display details for job 4

Consider the following example.

A number of jobs have completed :-

- The jobs that completed on time or late will NOT receive a bonus for early completion.
- The one job that completed early, at least one period before the planned duration, will receive a bonus. This was job 4.

We can use the **Display details for job 4** to take a closer look at the bonus that was paid.



Early Completion Bonus

Job 4 (Completed early)

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance/job details"

Management consultants report Risk analysis

JOB SUMMARY

JOB PROGRESS

Job progression											Profit analysis			
Planned schedule			Actual progress								By period		Cumulative	
Job period	Planned labour	Cumul % complete	Period	Status	Actual labour	Ineffect due to delays	Ineffect due to overman	Effective labour	Actual % complete	Completion status	Profit	Profit % of cost	Cumul profit	Cumul profit % of cost
1	54	30 %	3	Past	73	0.0	0.1	72.9	41.47 %	Ahead of schedule	316,803	8.4 %	316,803	8.4 %
2	90	80 %	4	Past	107	0.0	0.0	107.0	100 %	Completed early	370,058	6.8 %	686,861	7.5 %
3	36	100 %												

Total planned labour needed to complete the job is 180.

PERIOD 4

CLICK ON A LINE IN THE THE SUMMARY ABOVE TO SHOW THE DETAILS FOR EACH PERIOD THE JOB HAS BEEN PROGRESSSED

LABOUR ANALYSIS		COST ANALYSIS		VALUE AND PROFIT ANALYSIS	
PLANNED SCHEDULE		BUILD RELATED		Measured value: 5,749,664 ?	
Required labour:	90	Design cost:	414,869 ?	Early completion bonus:	49,119
Overmanning of:	35 % permitted	Build cost:	4,060,472 ?	Total value:	5,798,783
Effective labour limit (ELL):	121.5	Site cost:	834,222 ?	Total cost:	5,417,250
LABOUR ALLOCATED		Risk cost:	0	Total profit:	381,533 (6.8 % of costs)
Own:	107	Late completion penalty:	0		
Sub:	0	ADDITIONAL LABOUR COSTS		PROGRESS TO DATE	
Total labour allocated:	107 ?	Ineffective labour due to overmanning:	0	Amount of the job completed:	100 %
(less) labour lost by delays:	0 (ineffective)	Ineffective labour due to completing the job:	19,862 ?	Progress comment:	Ahead of schedule
		Training new recruits (Own):	85,000	Cumulative profit:	381,533 (7.5 % of costs)
		Labour payoffs (Own):	0	Completion ratio:	
		Subcontractor cost:	0		
		PROJECT MANAGER			
		Allocated:	Gordon Simcoe ?		
		Overall performance:	excellent		
		Salary:	13,750		
		Bonus:	550 (4 %)		
		Recruitment cost:	0		
		Relocation fee:	0		
		Previous payoff:	0		

BID SUBMITTED

Estimated design cost: 10 % of build cost

Consultant used: **The PW Partnership** [Details](#)

Estimated build cost: 7,091,780

Estimated site cost: 1,418,356

On cost: 163,436

Mark-up: 4.7 %

Bid: 9,823,740 ?

The client for job 4 is Madison Bank, who pay a 0.5% bonus for early job completion.

The early completion bonus paid was 0.5% of the bid value of 9,823,740, or 49,119.