

THALES

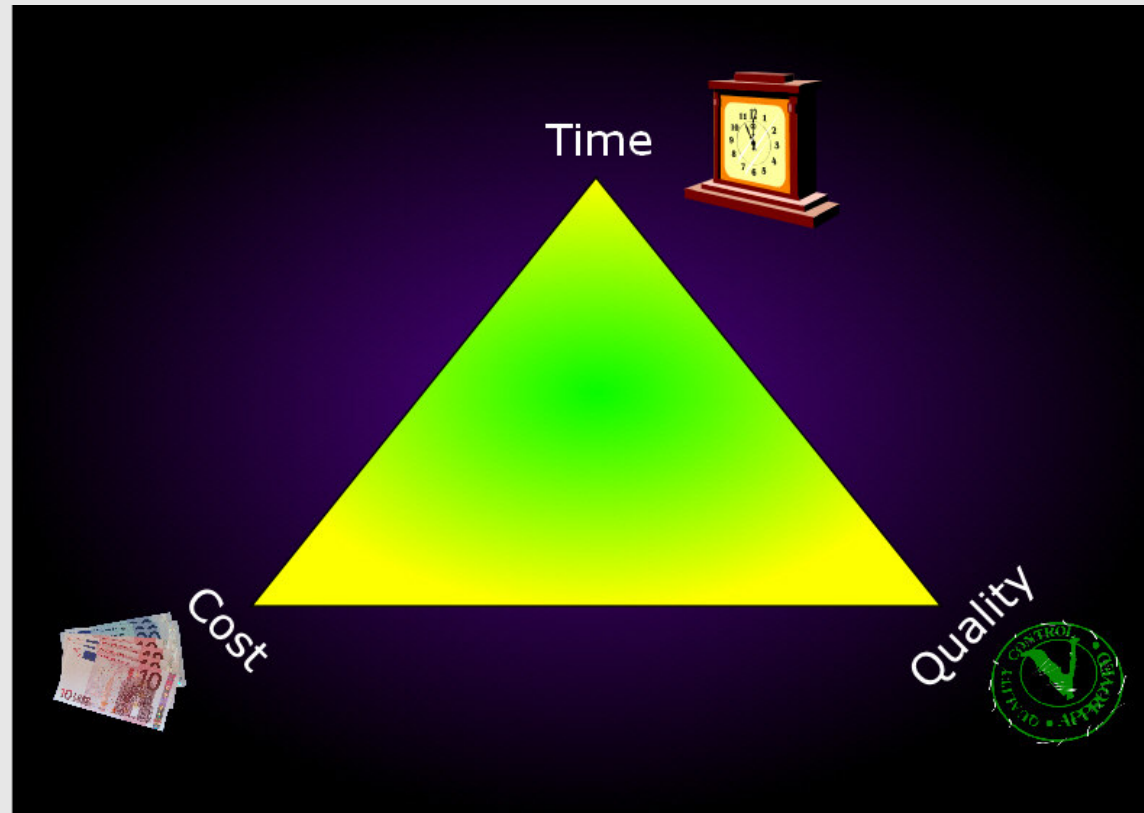
Developing people for success

Business focused learning solutions

Welcome to Project cost and schedule control

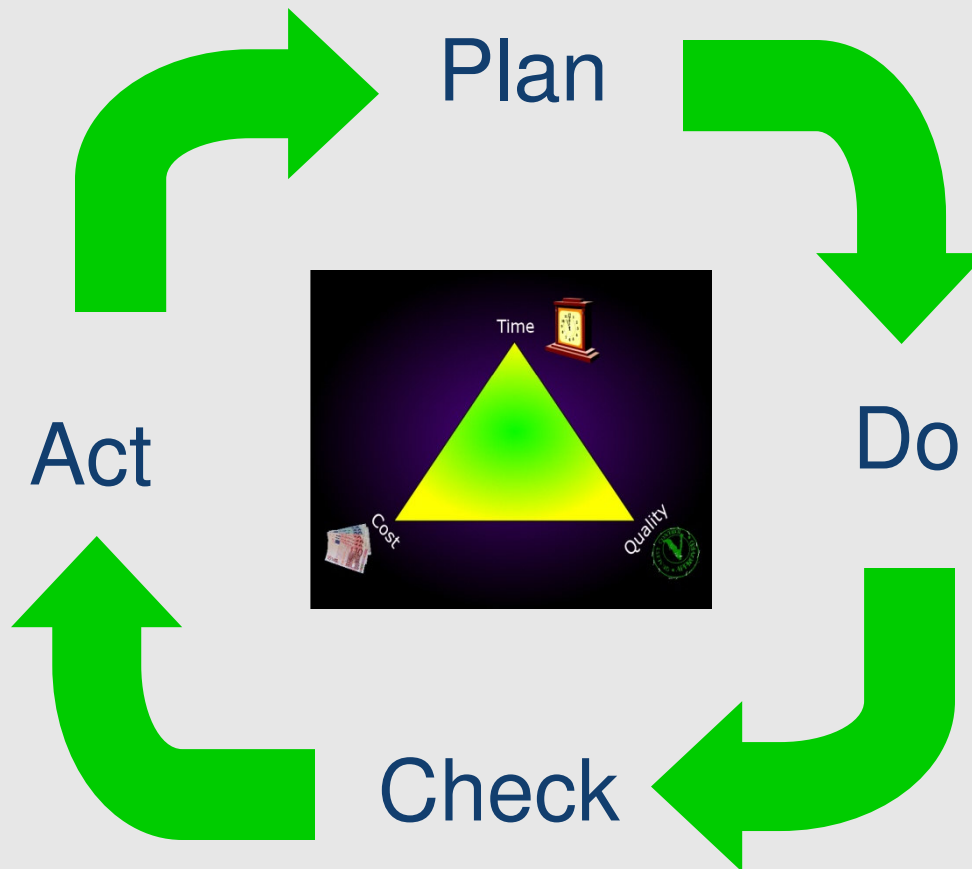
Your trainer is Mike Kerrigan

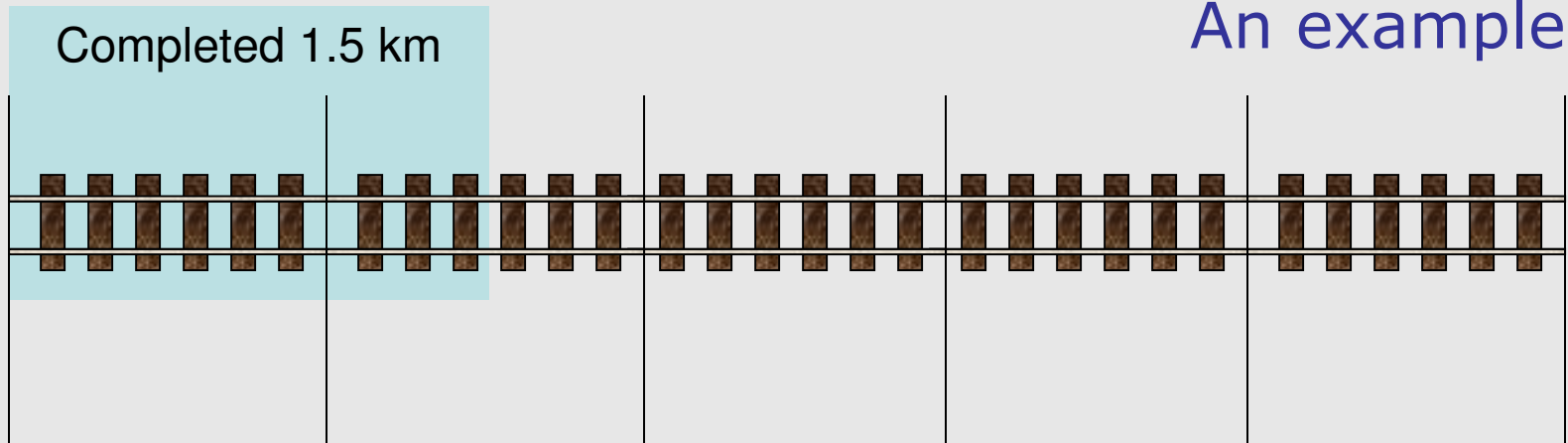
Project Management Basics



The Project manager is responsible for delivering all three

Managing the project





How is the project doing?

Project:

Build 5 km railway

Time allowed: 5 months

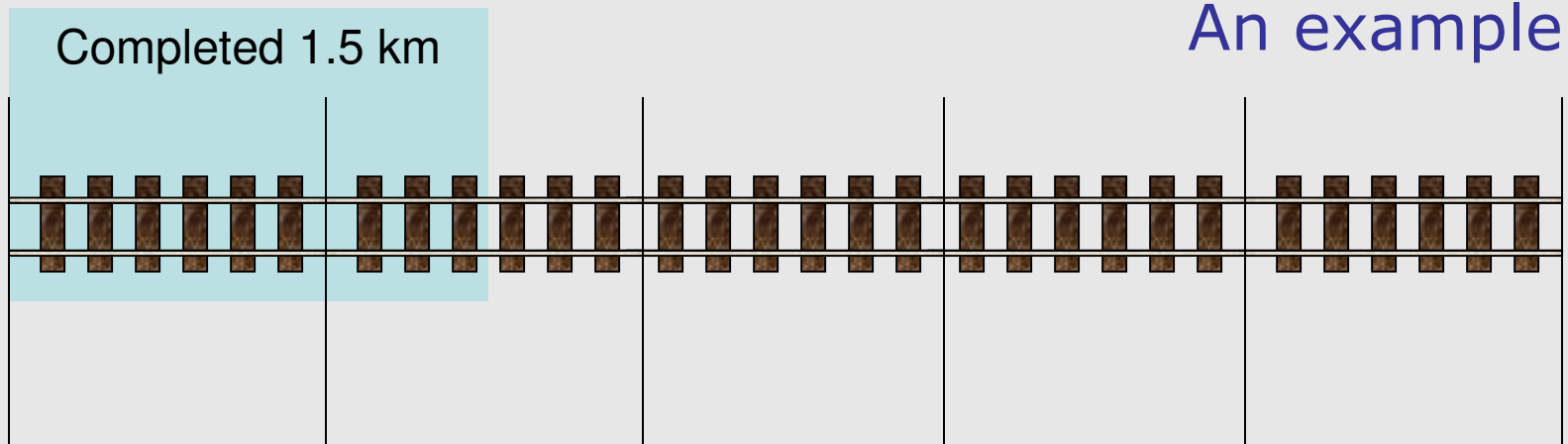
Budget: £100,000

End of month 2:

Cost?

Schedule?

Completion %?



How is the project doing?

End of month 2:

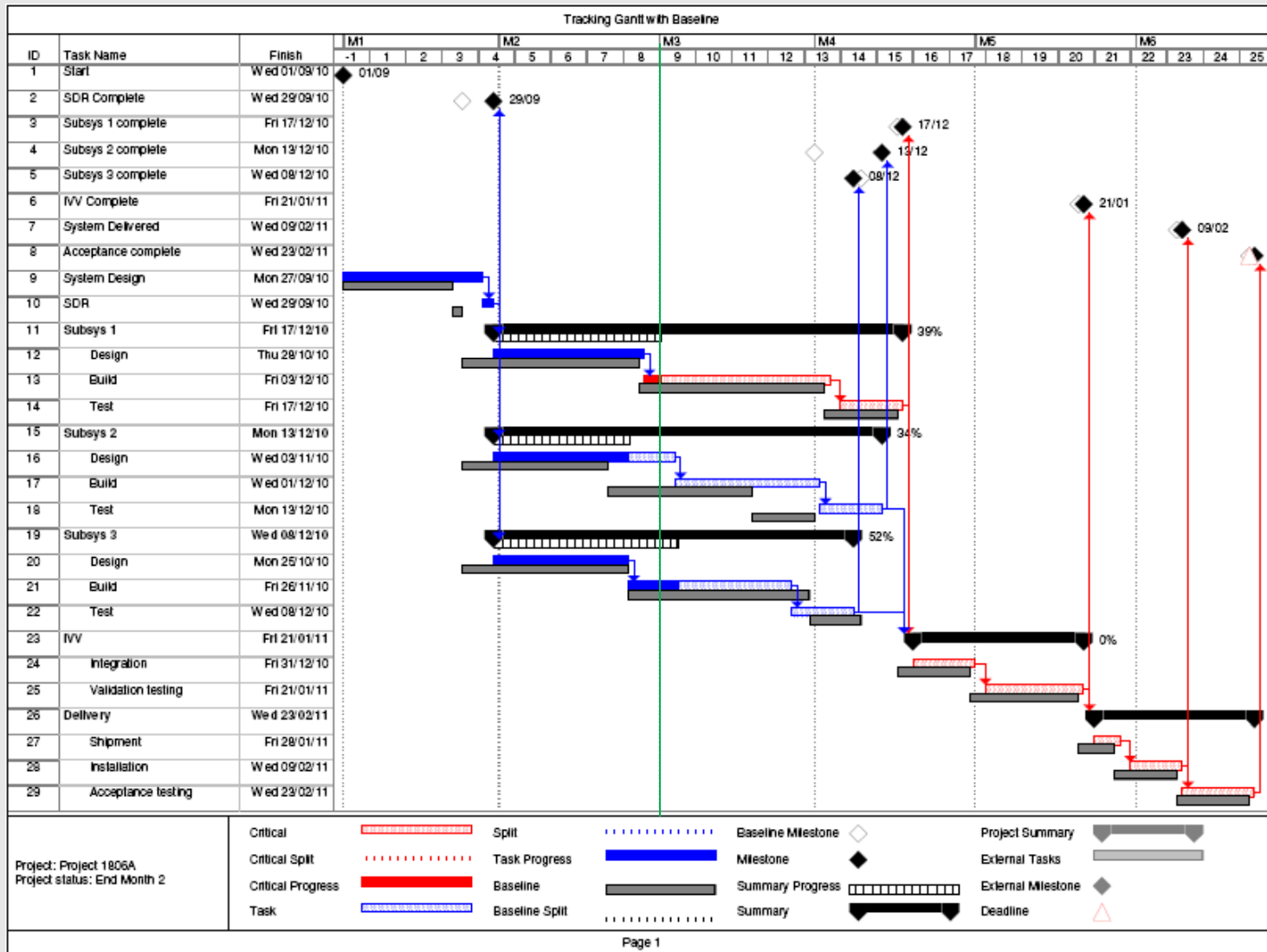
Time passed: 40% of duration

1.5 km of railway completed = 30% of requirement

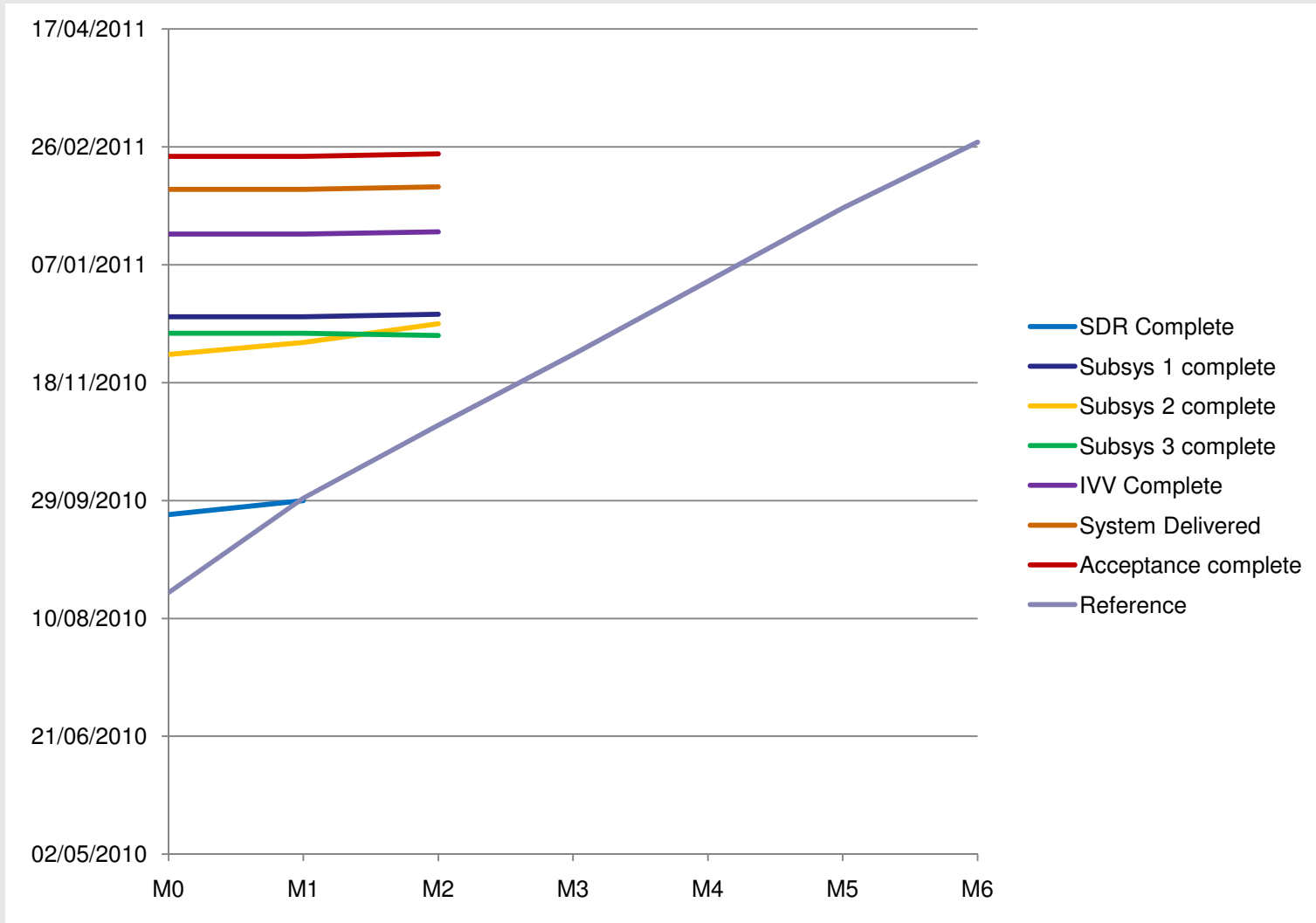
Spend to date: £38,000 = 38% of budget

How are we doing? 30/38/40% complete?

Gantt with baseline and Critical Path

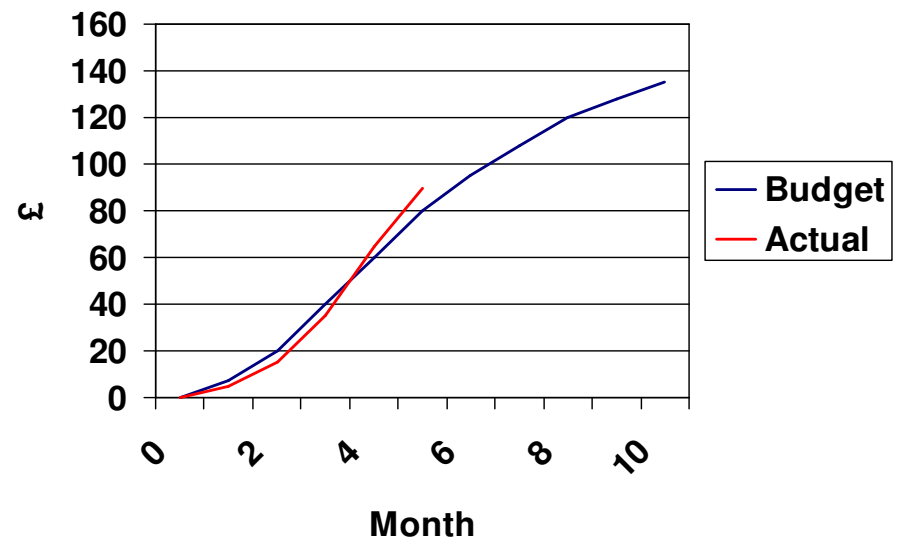
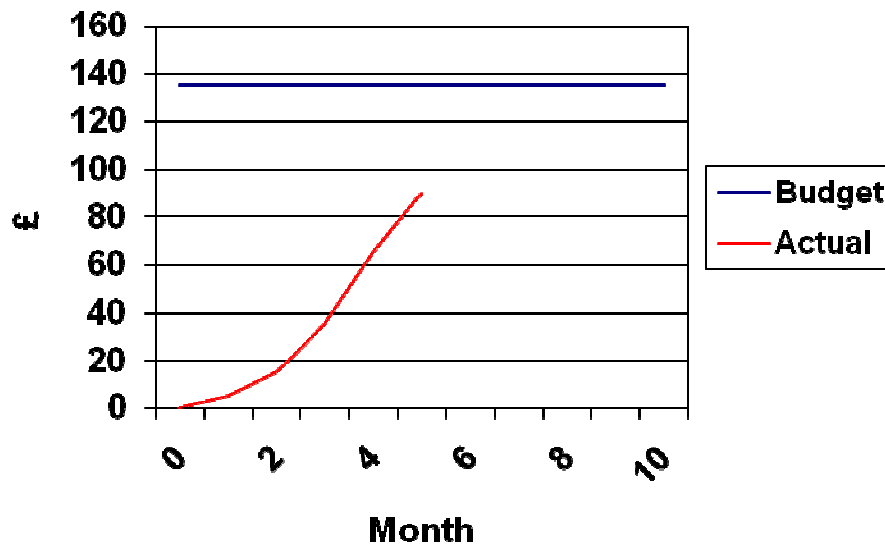


Milestone chart



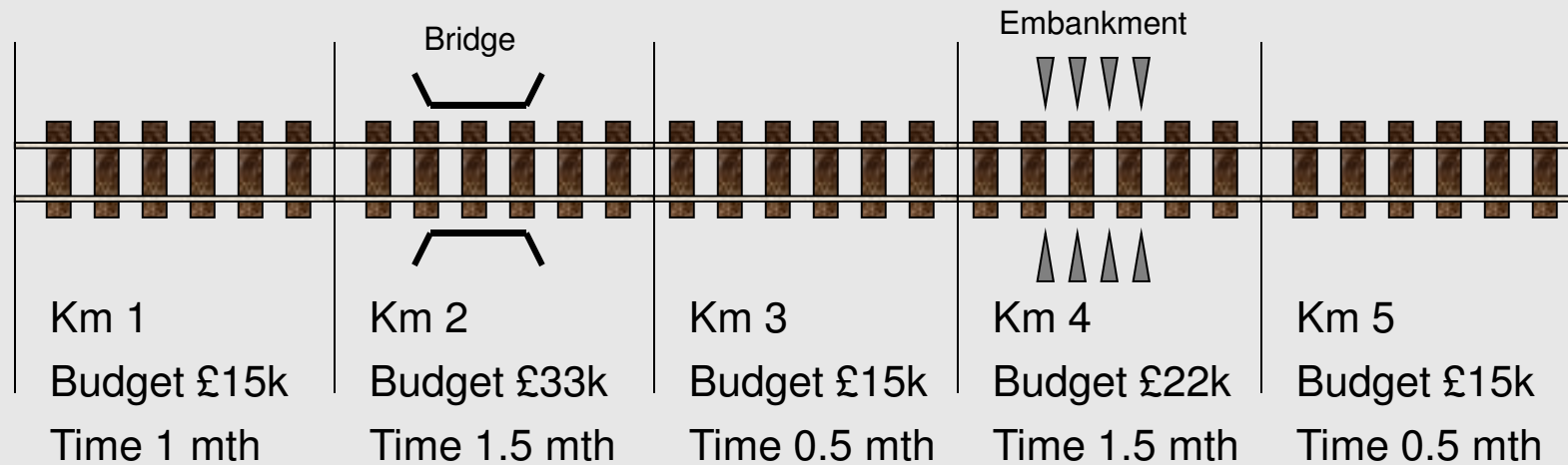
Traditional monitoring

- Cost:
 - What percentage of the budget has been spent?
 - What is our estimate to complete?
 - How much will it cost at completion?



Baseline plan

Back to the example



Project:

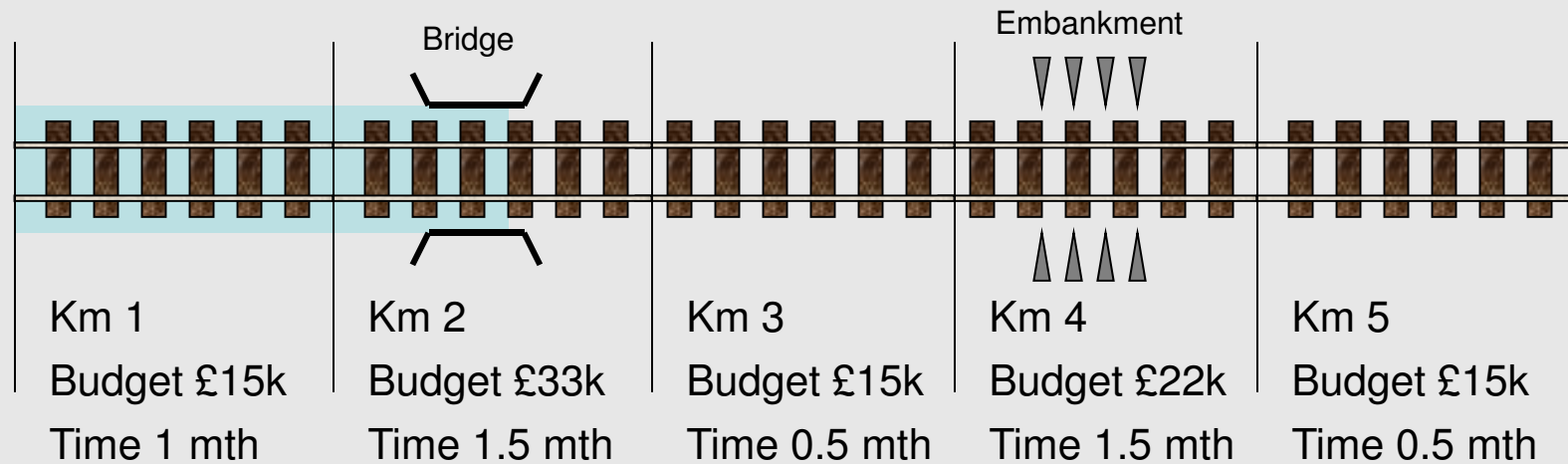
Build 5 km of railway

Budgeted cost: £100,000

Delivery timescale: 5 months

Where are we?

Schedule end of month 2



Value of work planned to be completed:

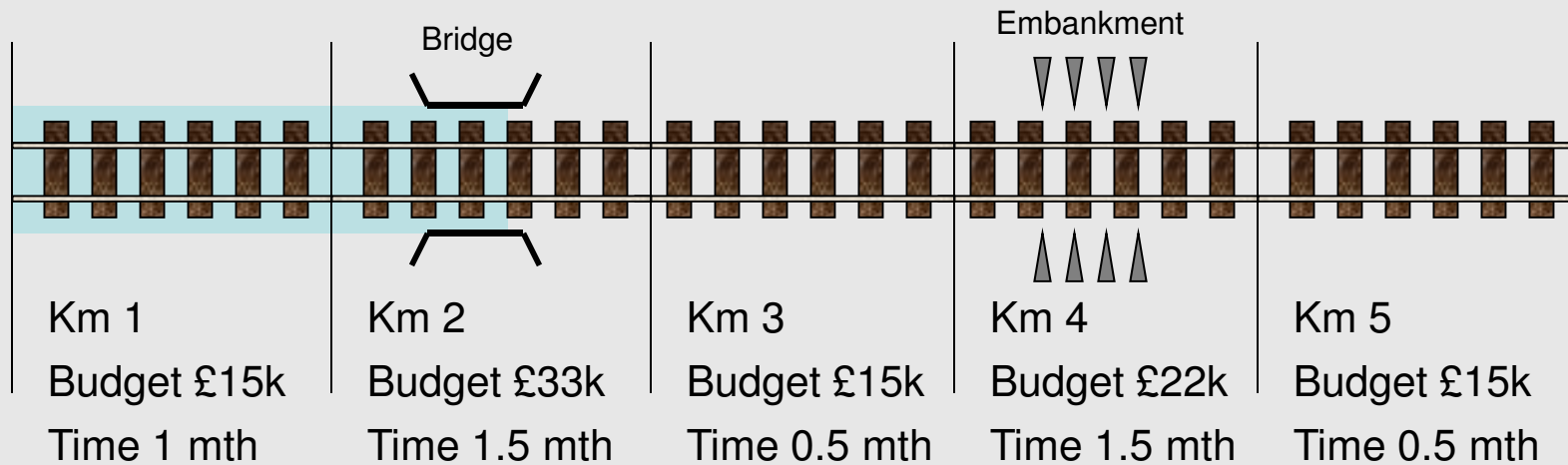
In month 1 = £15k

In month 2 = $(1/1.5 \times £33k) = £22k$

Planned value = £15k + £22k = £37k

Where are we?

Schedule end of month 2



Value of work completed:

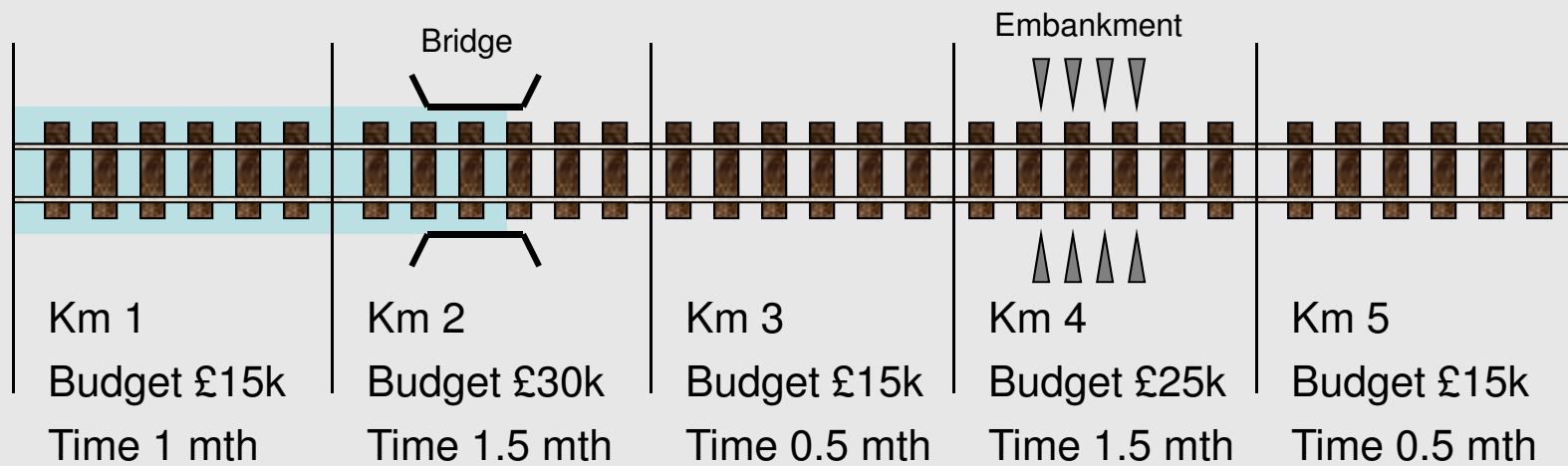
Km1 = £15k

Km2 = 50% of £33k = £16.5k

Earned value = £15K + £16.5k = £31.5k (31.5% of total value)

Where are we?

Schedule end of month 2



Earned value = £31.5k = 31.5%

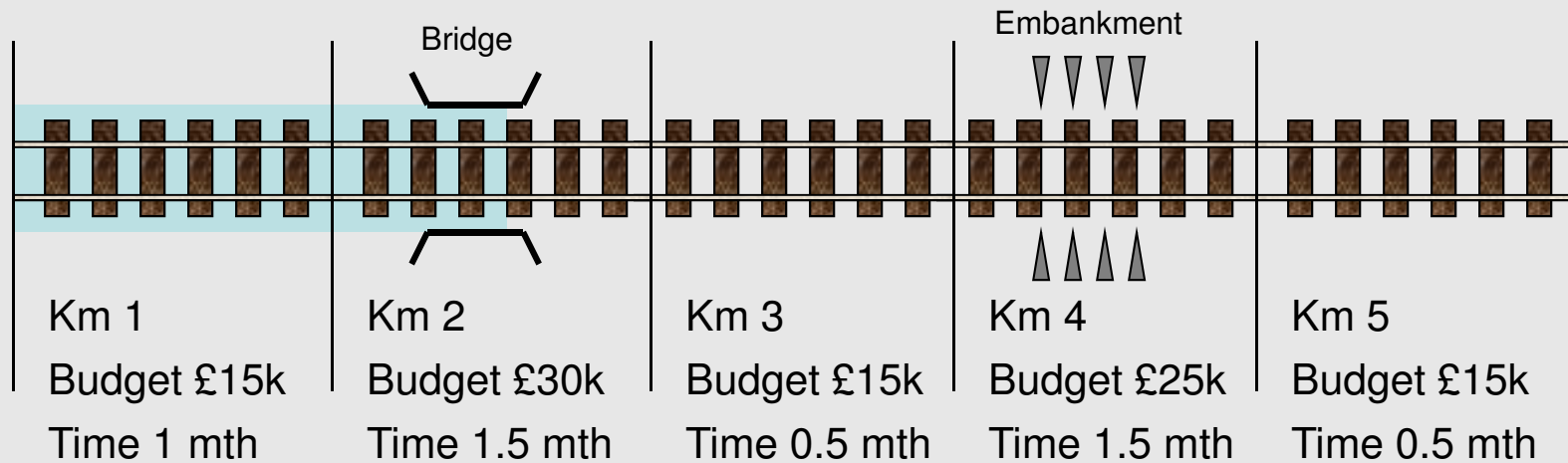
Planned value = £37k = 37%

Conclusion: Value of work done is 5.5% less than planned

Behind by £5.5k value of work

Where are we?

Costs end of month 2



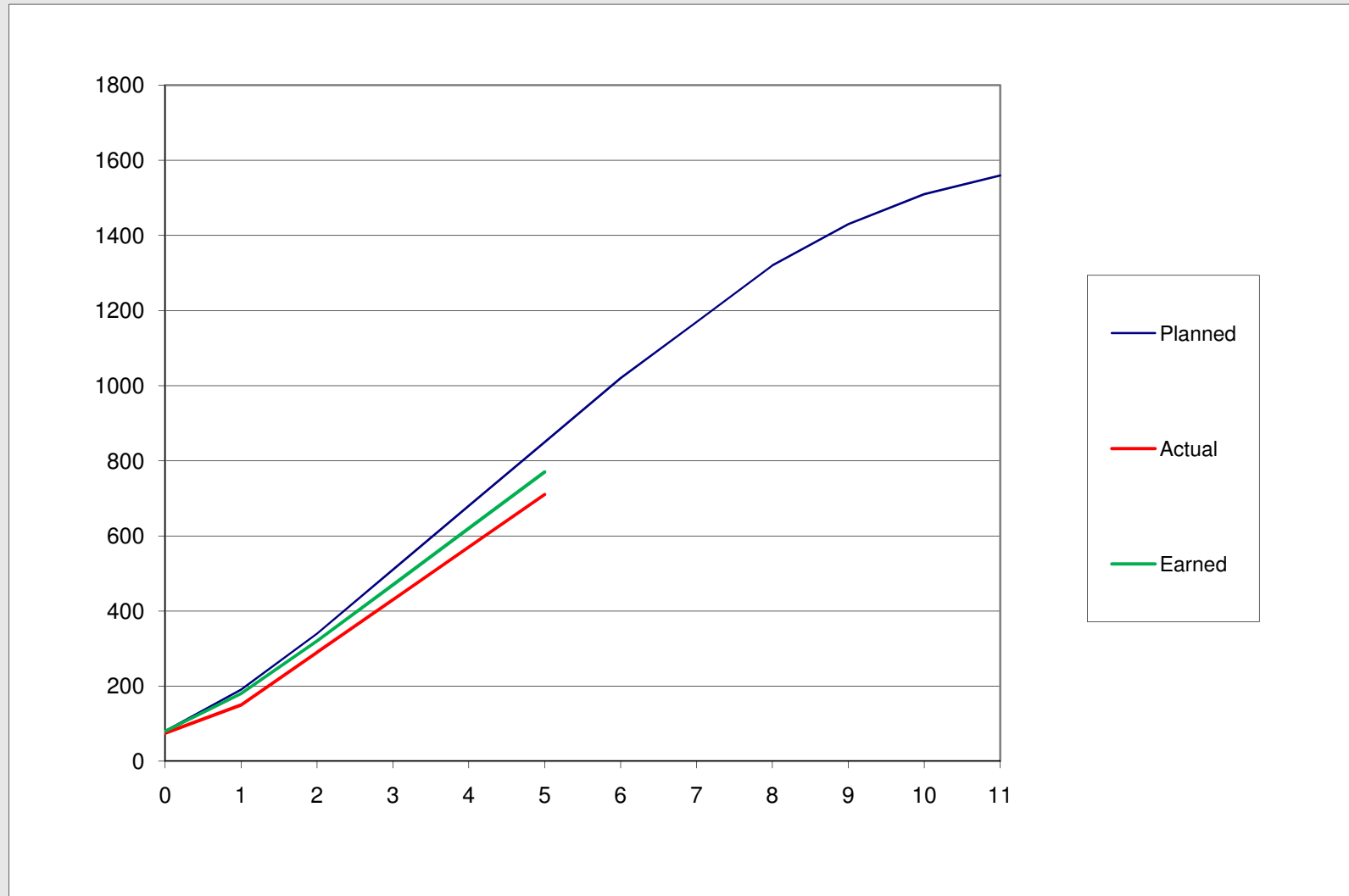
Earned value = £31.5k = 31.5% of budget

Actual costs = £38k = 38% of budget

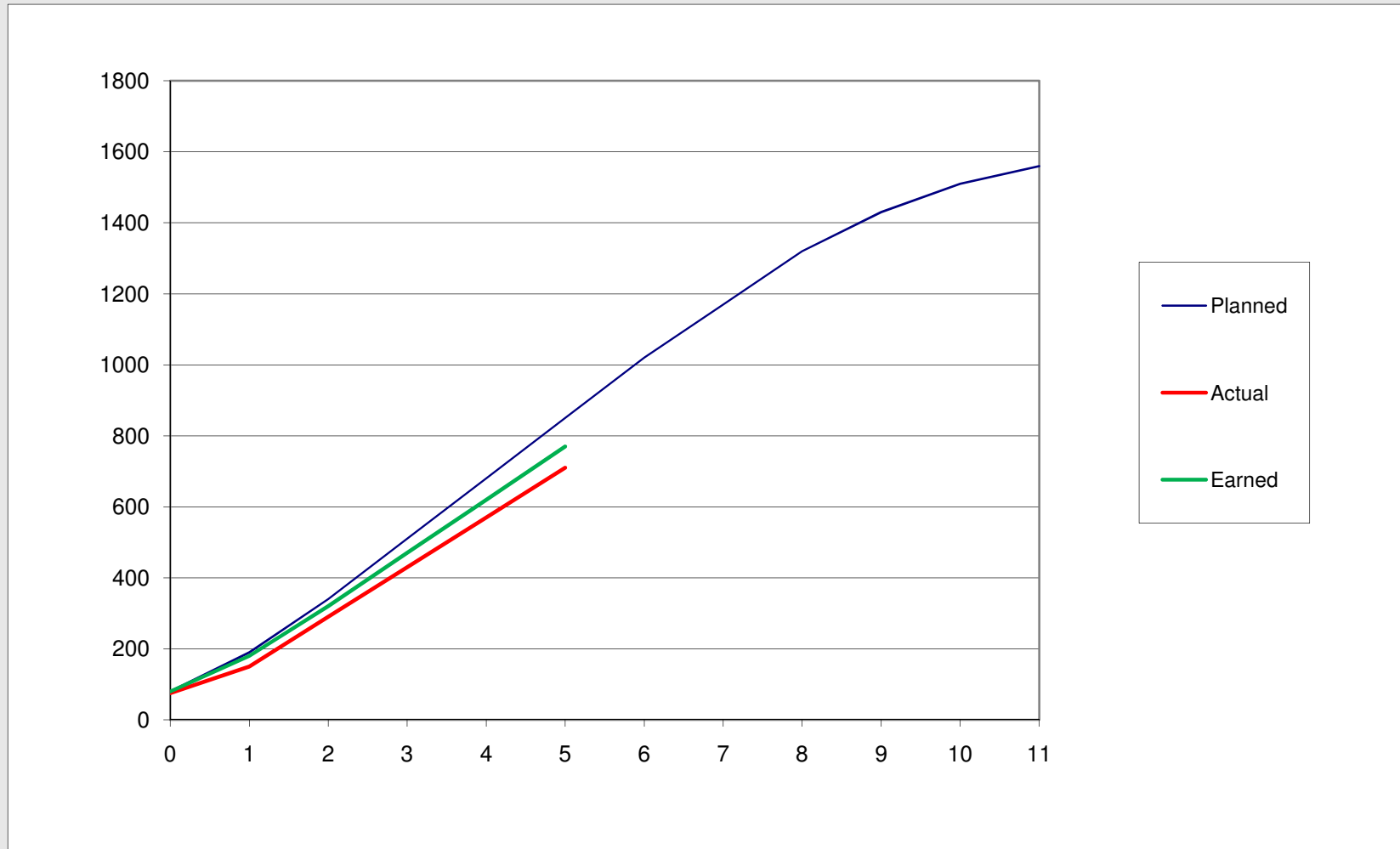
Conclusion: Spent 38% of budget doing 31.5% of the work

Overspent by £6.5k

How are we doing?



How are we doing?

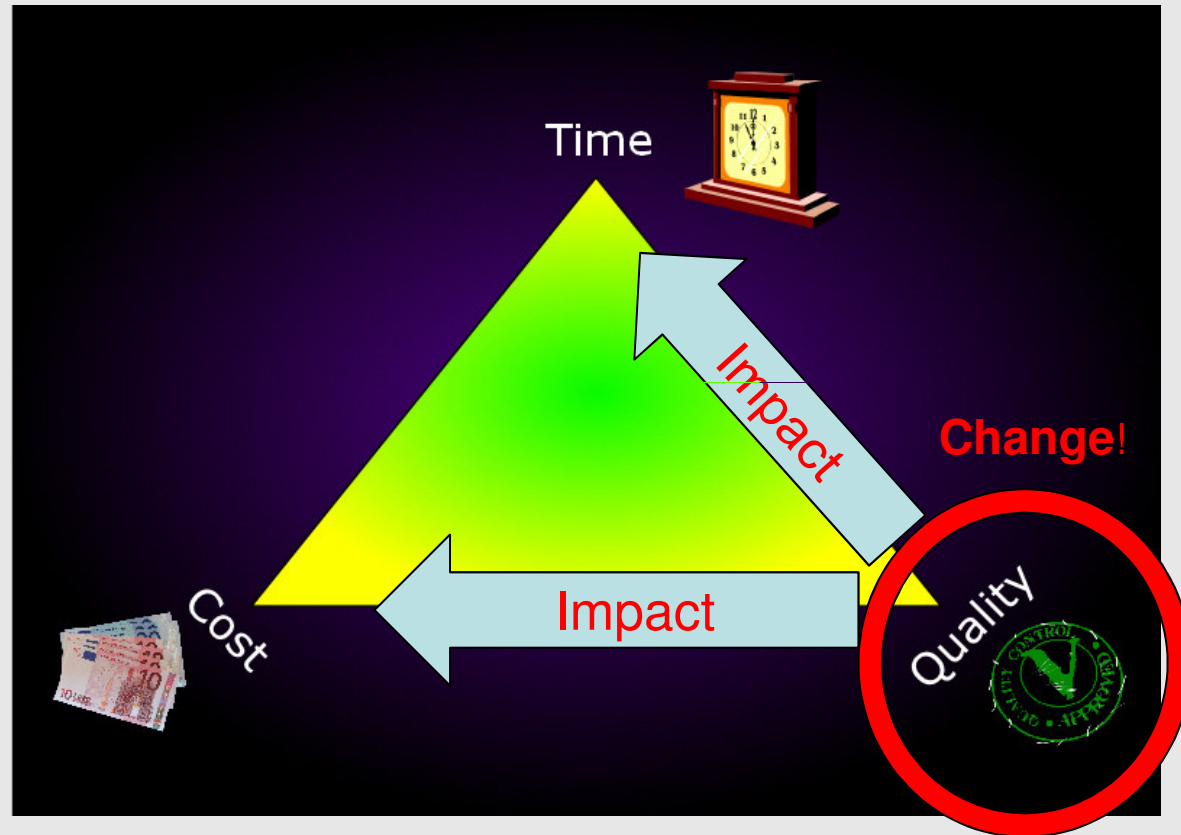


Estimate at Complete (EAC)

If we continued to perform as we have to date:

$$\text{EAC} = \text{Budget} \times \frac{\text{Actual cost}}{\text{Earned}}$$

Change



Change in requirements will impact Time and Cost