



ADB

FIDIC Contract Management Workshops

Introduction to Costs for Delay Claims

Islamabad Day 3 – 30 August 2023

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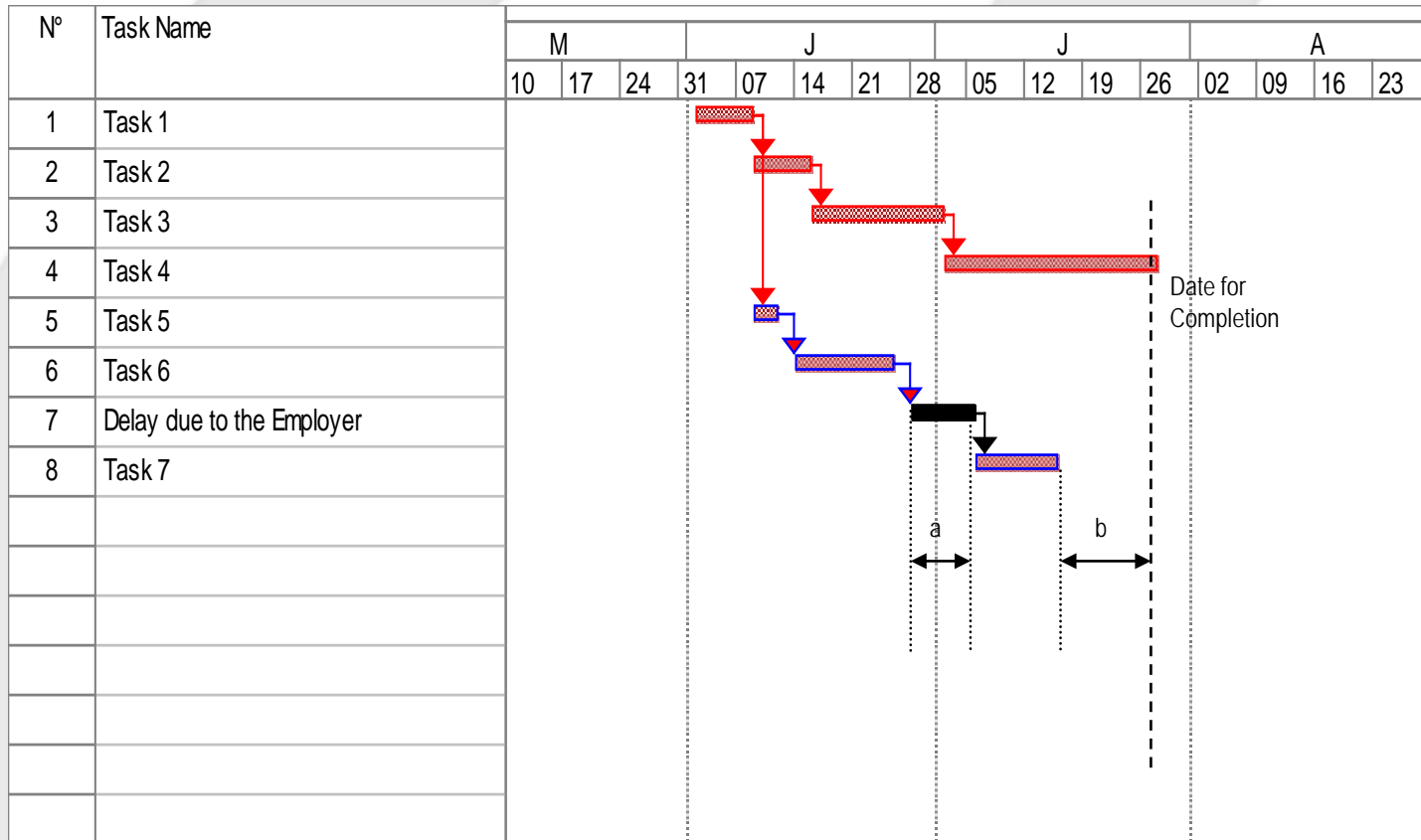
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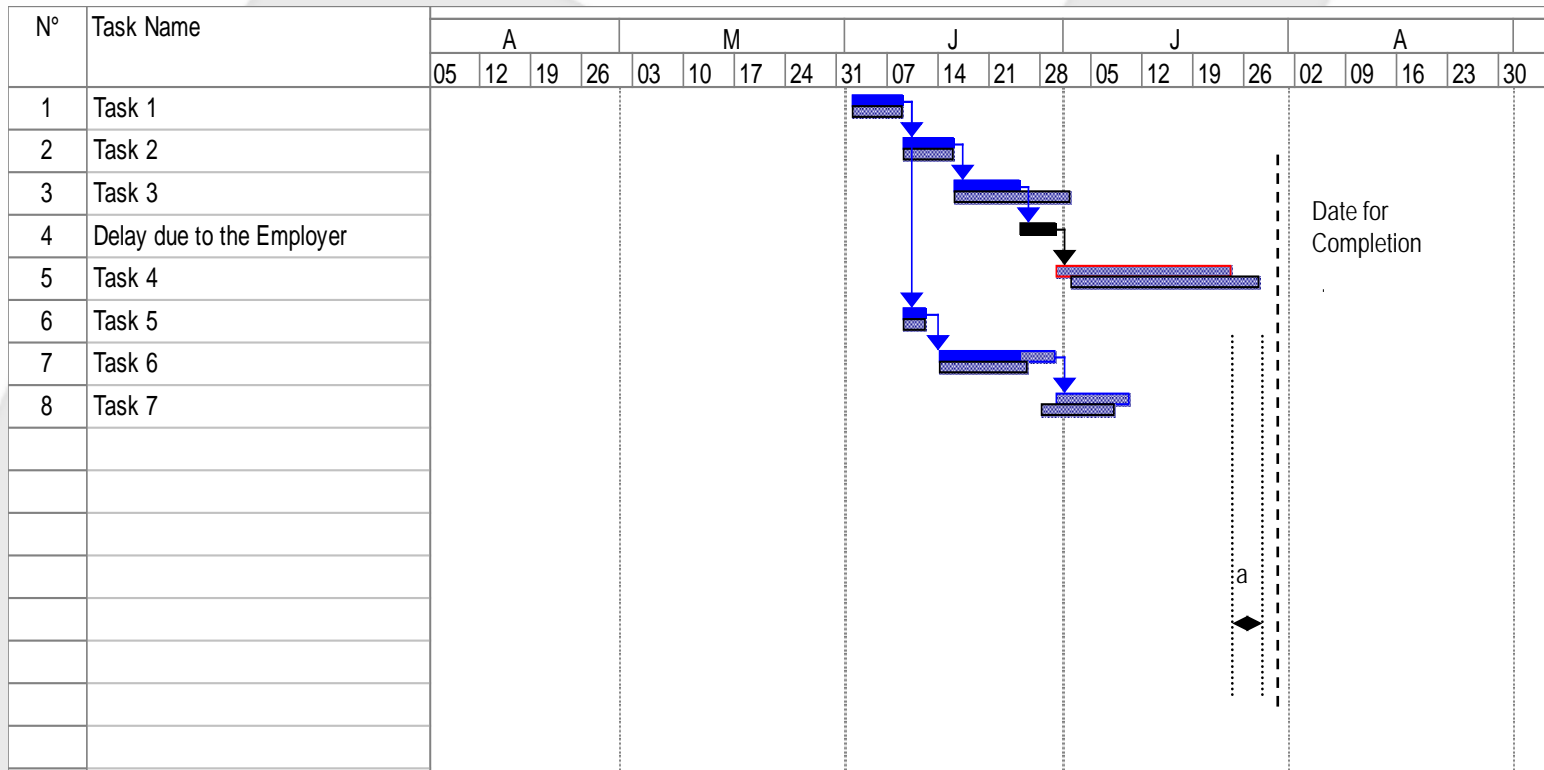
Quantum - Claims for Delay

DELAY NOT AFFECTING THE CRITICAL PATH



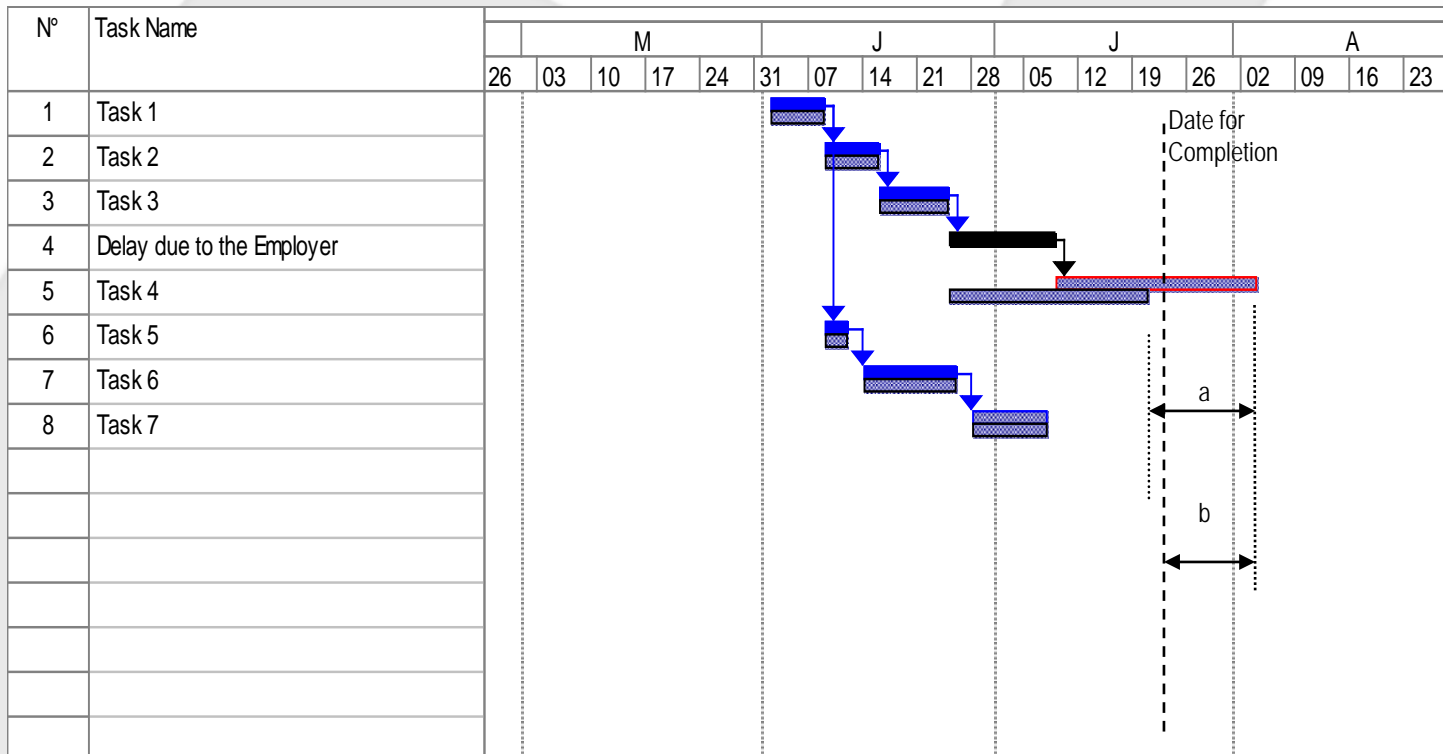
Quantum - Claims for Delay

DELAY AFFECTING THE CRITICAL PATH BUT WITHOUT THE DATE FOR COMPLETION BEING EXCEEDED



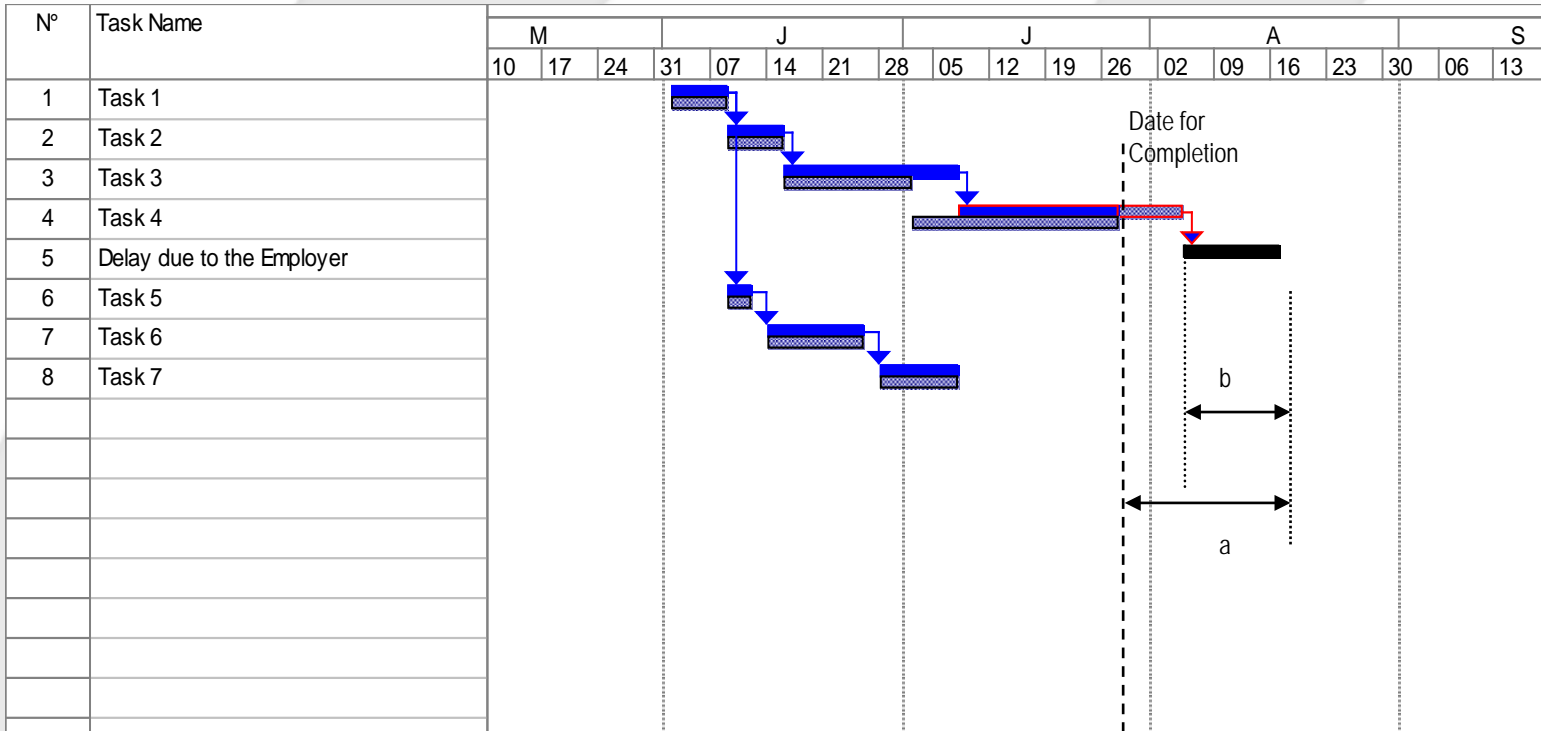
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DELAY AFFECTING THE CRITICAL PATH SO THAT THE DATE FOR COMPLETION IS EXCEEDED



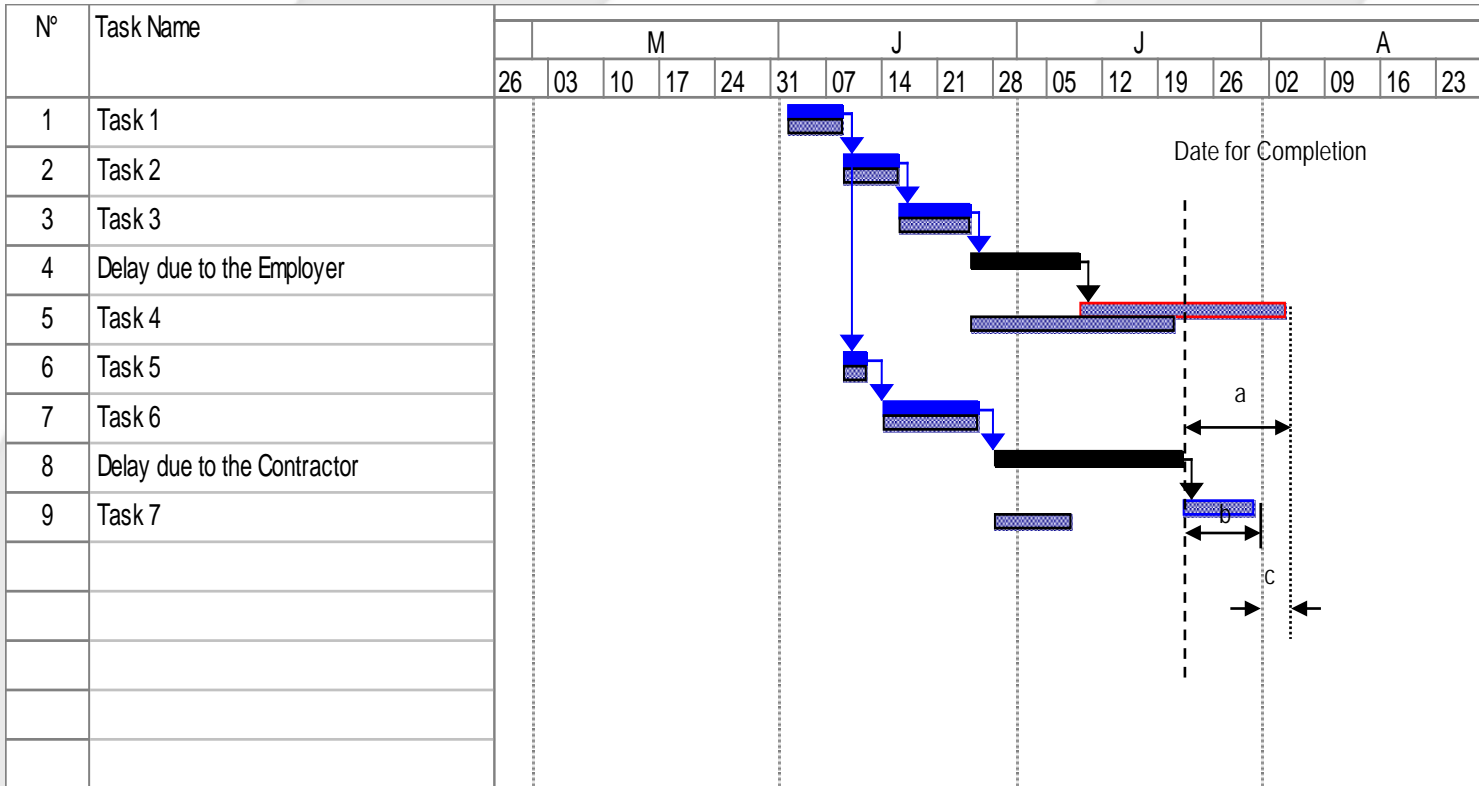
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DELAY CAUSED BY THE EMPLOYER AFTER THE DATE FOR COMPLETION



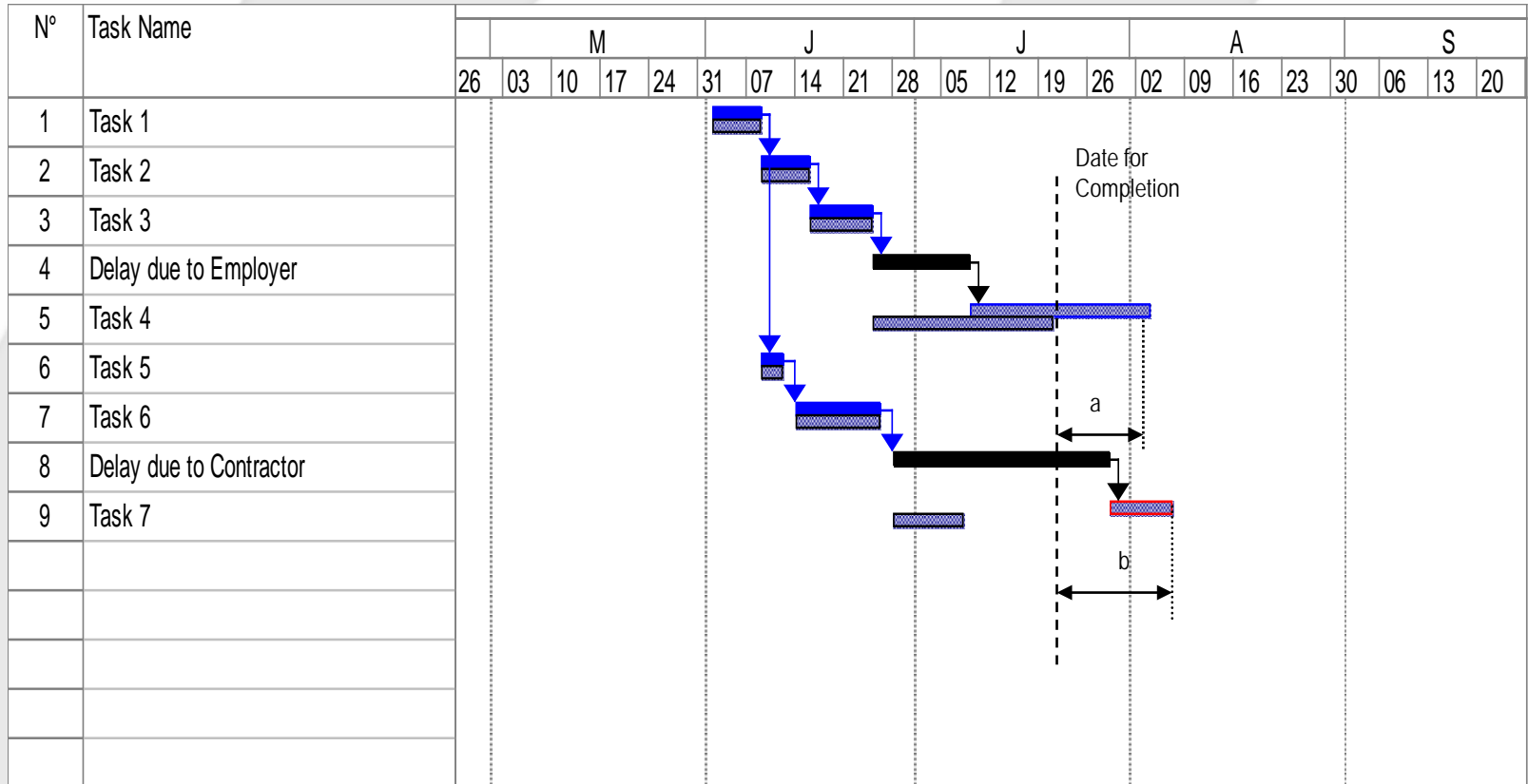
Quantum - Claims for Delay

DELAYS DUE TO EACH OF THE PARTIES – Case 1



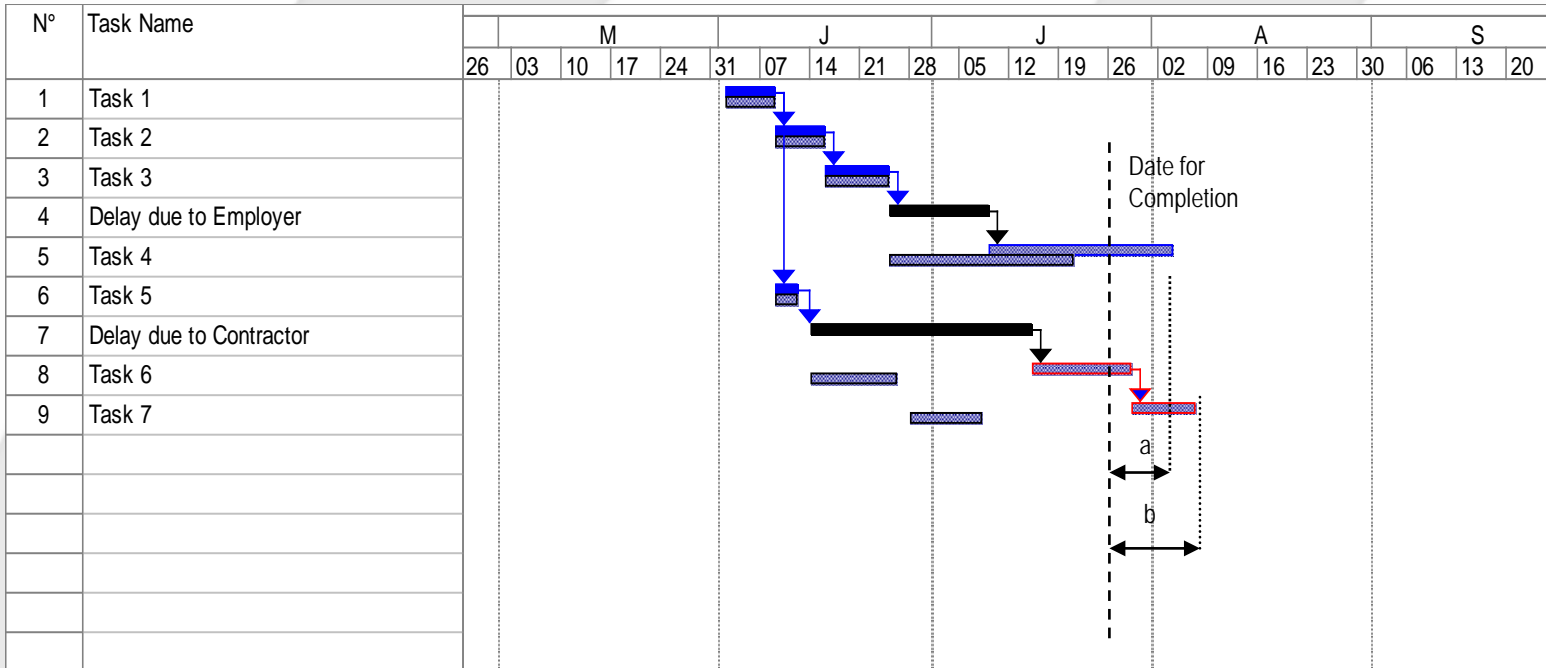
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DELAYS DUE TO EACH OF THE PARTIES – Case 2



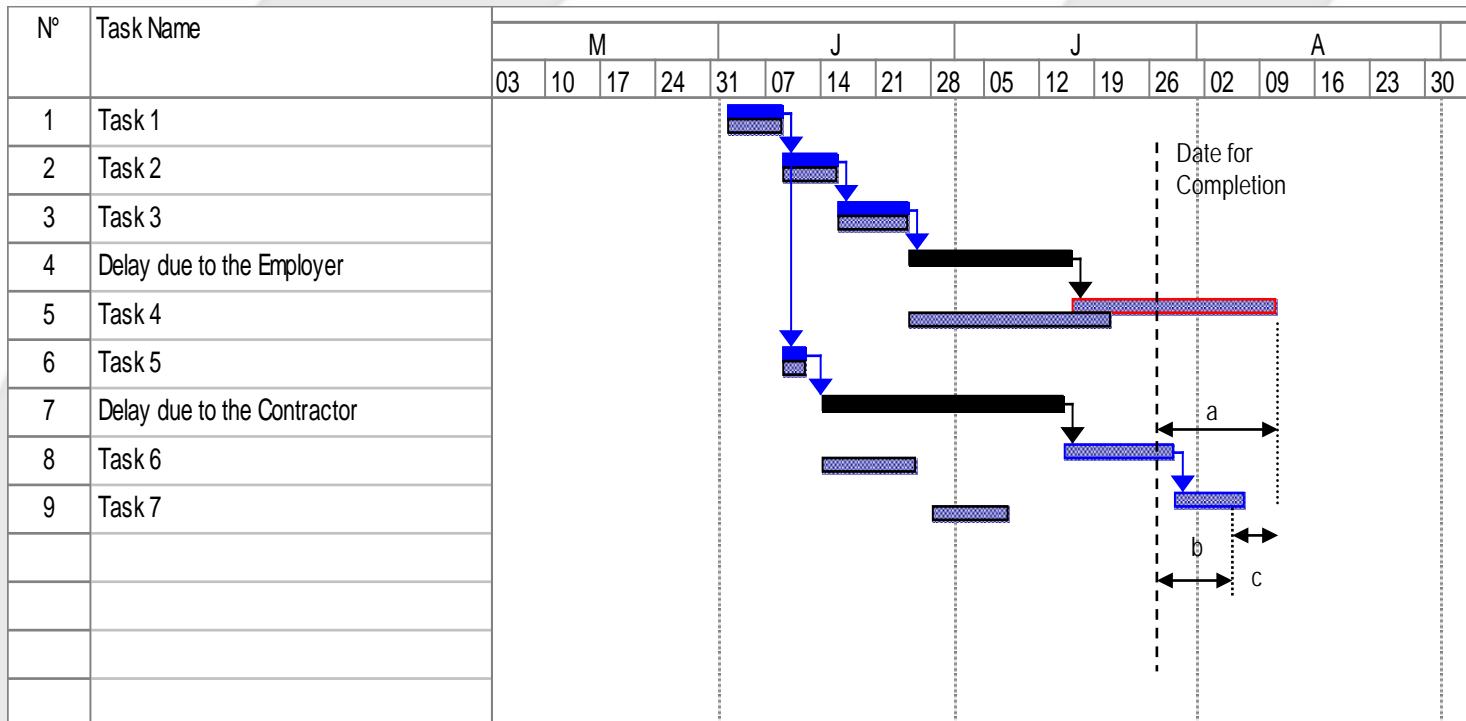
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DELAYS DUE TO EACH OF THE PARTIES – Case 3



Quantum - Claims for Delay

DELAYS DUE TO EACH OF THE PARTIES – Case 4



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Cost v Price

- At law, the Contractor has the right to reimbursement of his costs unless the Contract expressly states otherwise.
 - *“Cost” means all expenditure reasonably incurred (or to be incurred), by the Contractor **in performing the Contract**, whether on or off the Site, including **taxes**, overhead and similar charges but does not include any allowance for profit”*
(PB Sub-Clause 1.1.4.3 and 2017 RB SC 1.1.19 added text in red)
- The use of "Preliminaries" or other PRICES in order to evaluate prolongation costs should therefore be avoided – unless the cause of a compensable delay was a Variation,

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Different categories of Costs

- **Direct Costs** (Labour, Equipment, Materials, Sub-contractors).
- **Indirect Site Costs** (Management & Supervisory staff, Support staff, Offices, Consumables, Insurances, etc.) – sometimes called Site Overheads.
- **Indirect Head Office Costs** – sometimes called Head Office Overheads.
- **Inflation**
- **Financing Costs**

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- The Contractor must be able to prove that he has actually incurred or will incur the Costs claimed .
- Often actual costs cannot be ascertained before the end of the Works – but this does not release the Contractor from his obligation to provide interim details on the basis of the best information available.

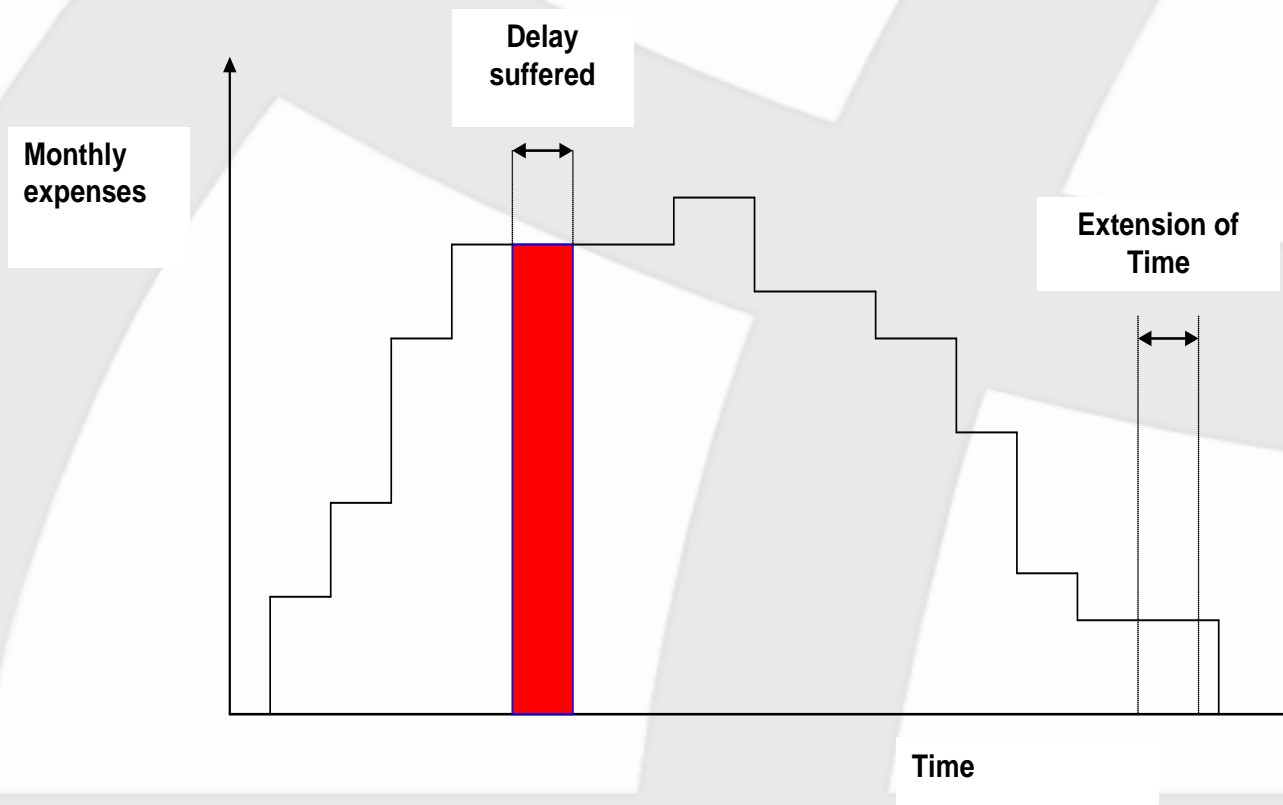
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Prolongation Costs due to Variations or Increases in Quantity:

- Are not expressly foreseen by the Contract.
- Must be claimed via existing or new prices under Clause 13.3, if the Engineer asks for a proposal from the Contractor before confirming his instruction to execute the Variation.
- Are to be assessed at the time of pricing the Variation – this means that the extension of time due to the Variation must also be assessed.

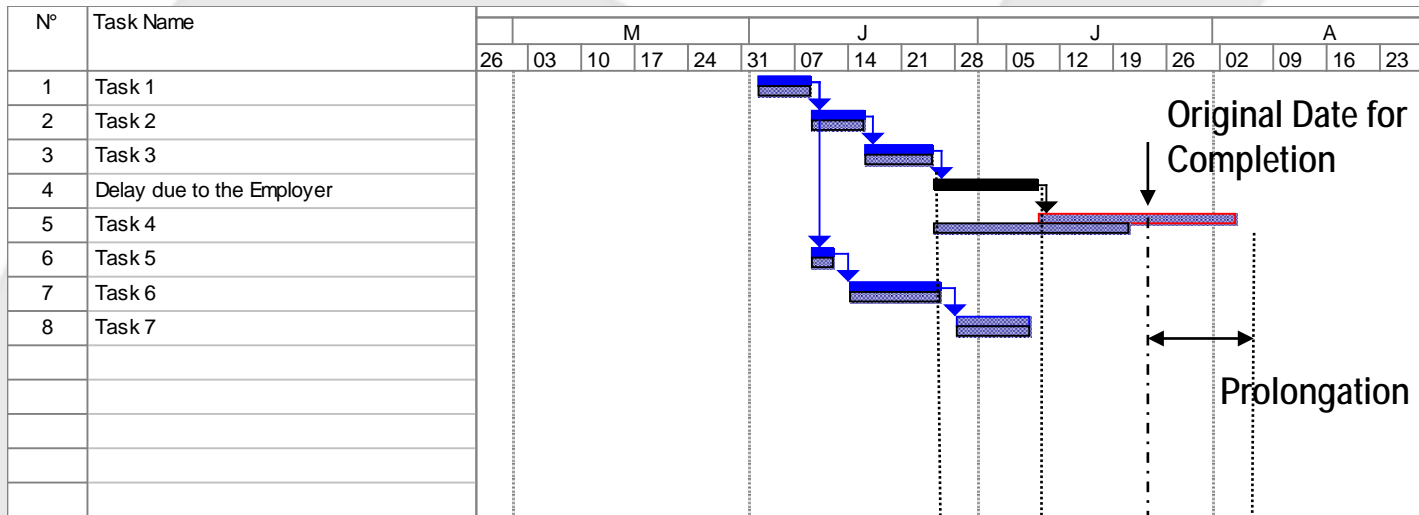
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Period to be taken into account for evaluating Additional Costs

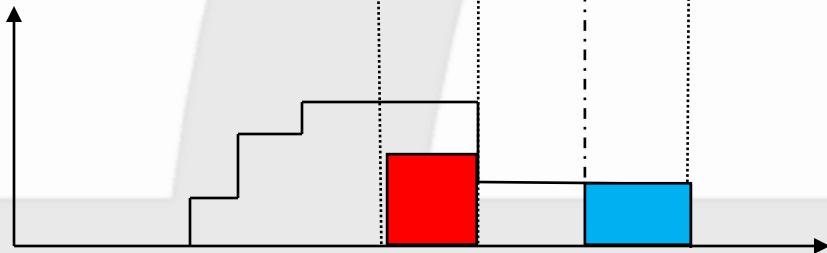


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DELAY TO CRITICAL PATH CAUSING - DATE FOR COMPLETION TO BE EXCEEDED

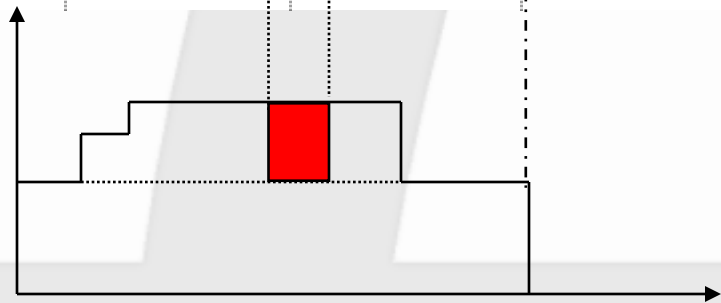
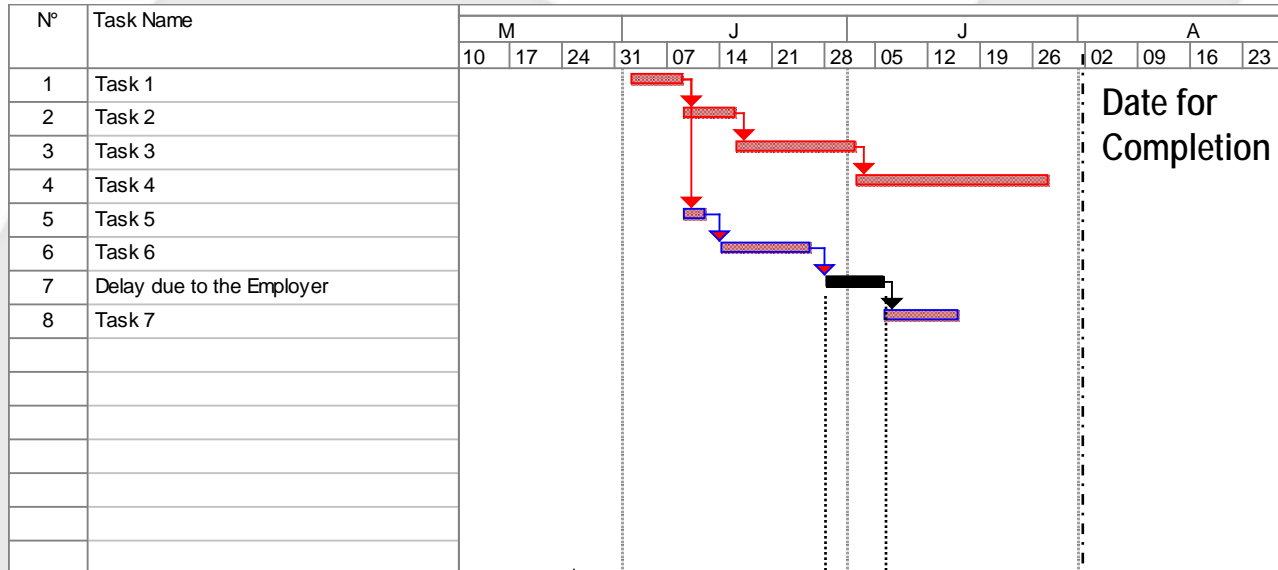


Costs/week



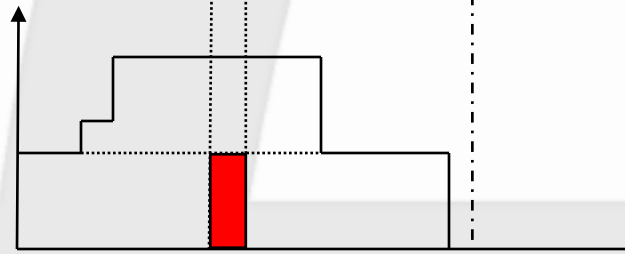
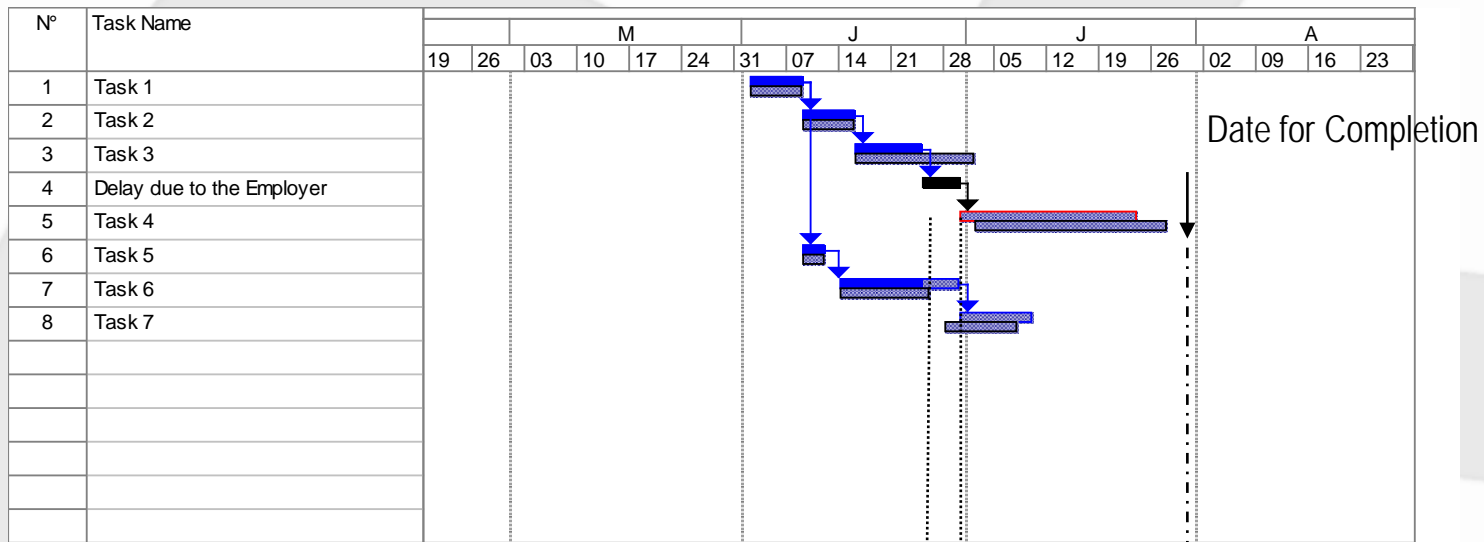
Claims for Additional Payment

DELAY NOT AFFECTING THE CRITICAL PATH



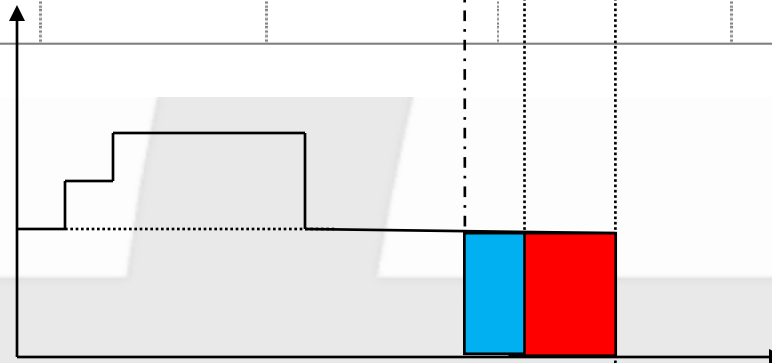
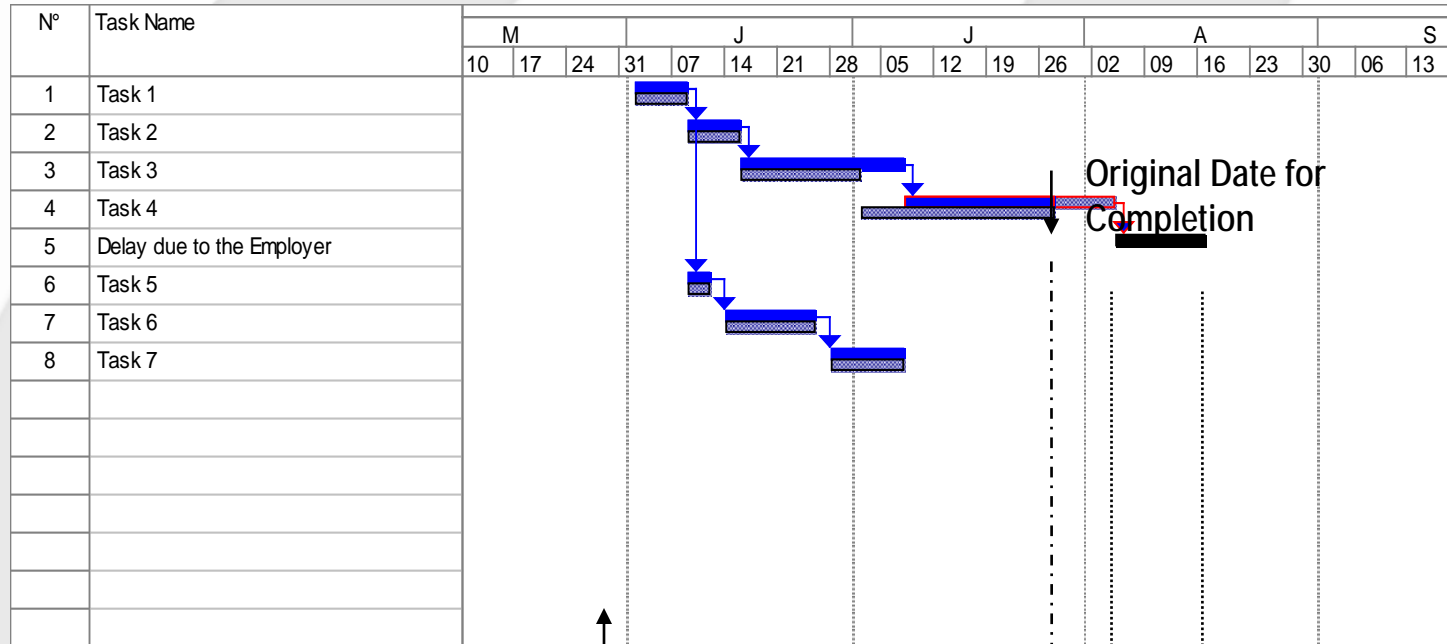
Quantum - Claims for Additional Payment

DELAY TO CRITICAL PATH – BUT THE DATE FOR COMPLETION IS NOT EXCEEDED



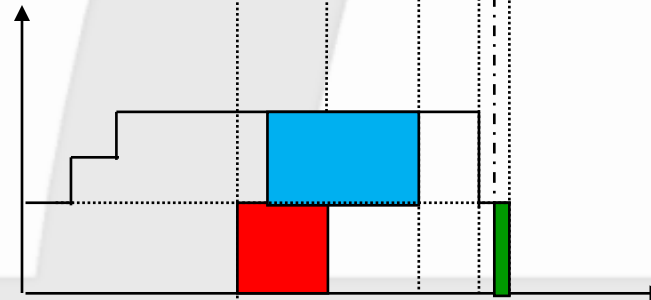
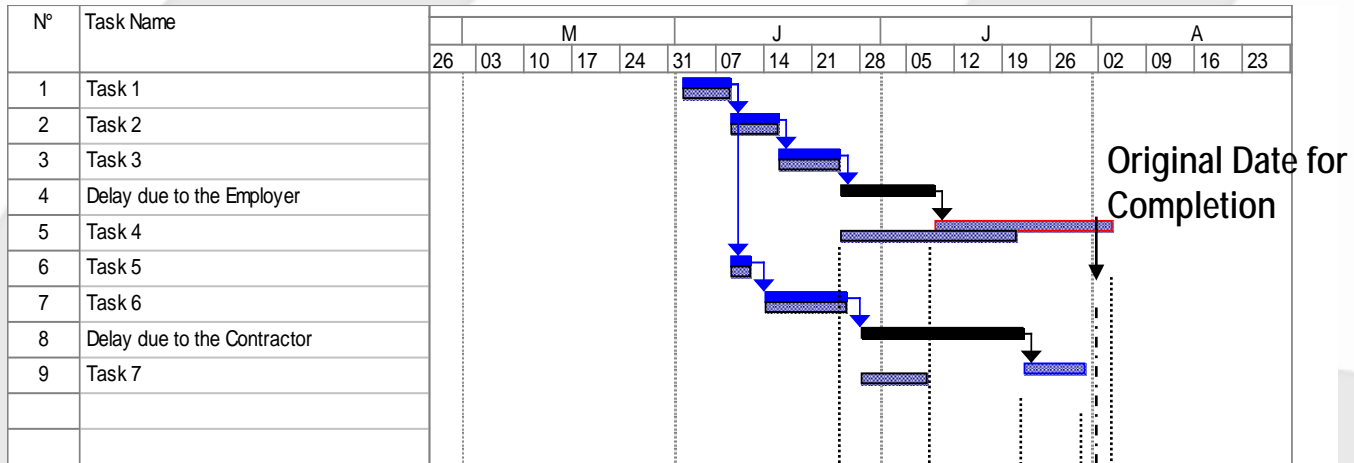
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DELAY DUE TO THE EMPLOYER AFTER THE ORIGINAL DATE FOR COMPLETION



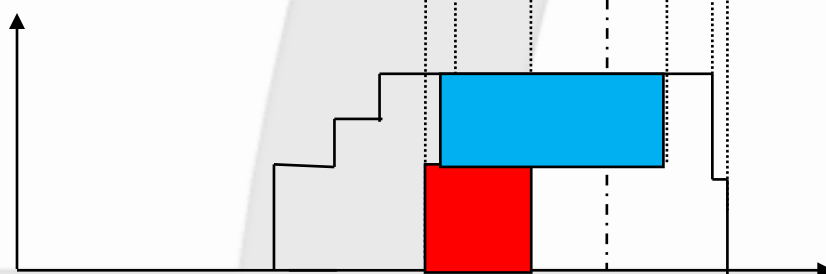
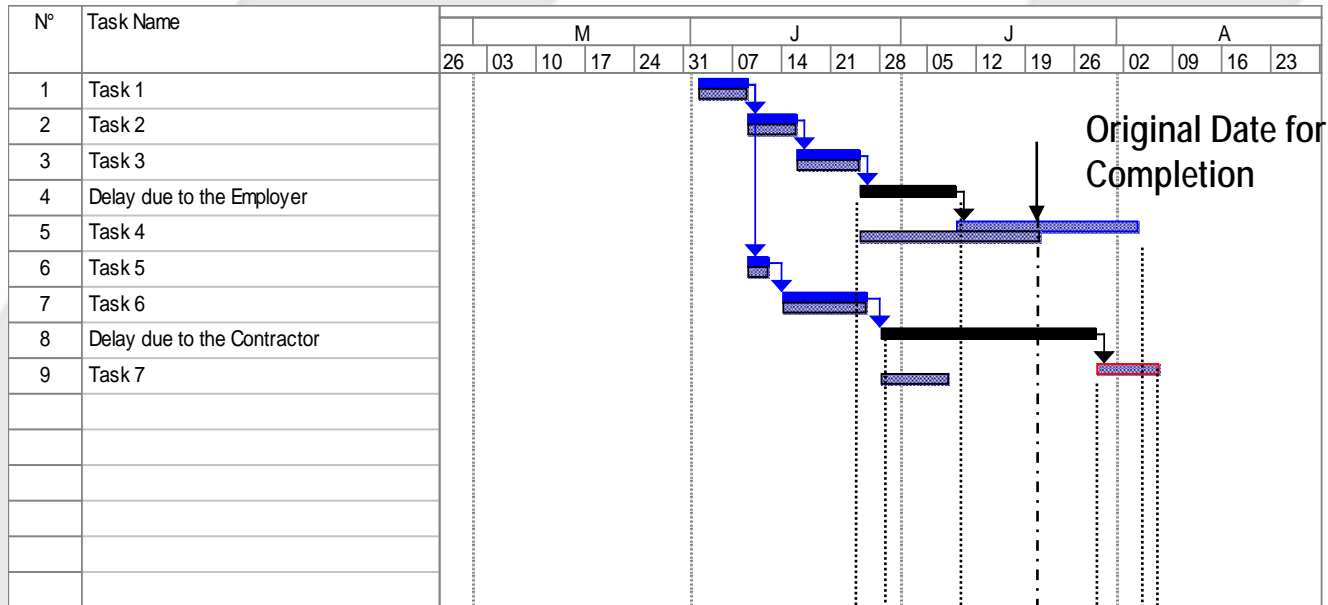
Quantum - Claims for Additional Payment

DELAYS DUE TO EACH OF THE PARTIES – Case 1



Quantum - Claims for Additional Payment

DELAYS DUE TO EACH OF THE PARTIES - Case 2



Quantum - Claims for Additional Payment

Disruption or loss of efficiency:

- *The Society of Construction Law's Delay and Disruption Protocol 2nd Edition* (October 2017): defines "*disruption*" (as distinct from delay) as a disturbance, hindrance or interruption to a Contractor's normal working methods, resulting in lower efficiency.
- Work so disturbed by a cause for which the Employer is responsible, can give rise to a claim from the Contractor for the cost of the lost efficiency, even if it does not give rise to a right to an extension of time.

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Disruption or loss of efficiency:

The most common causes of disruption are:

- the loss of work rhythm (caused for example by additional moves between work areas or by out-of-sequence working),
- congestion of the work area (caused by a concentration of different work trades, that is: workers of one trade begin working in an area before the preceding trade has finished in that area),
- increases in the size of work gangs,
- increases in the length and/or number of shifts worked (overtime).

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Disruption or loss of efficiency:

- The causes of disruption can also be symptoms of poor site management.
- The Engineer has to take a fair view of the situation, as the two causes are often difficult to separate. Hence the need for the Engineer to be very close to the programme update process.
- To be in the best possible position to assess the situation, excellent records of man-power, equipment and productivity are required.

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Disruption or loss of efficiency:

- The best way to prove disruption consequent to an event for which the Employer is responsible is to compare the poor productivity with productivity in areas or during periods which have not been disturbed. (*"Measured Mile"*)
- See the following example

Area/Period of Normal Work		Area/Period of Disrupted Work	
Amount invoiced for tiling work during the period	\$ 1060	Amount invoiced for tiling work during the period	\$ 1100
Number of manhours spent on tiling during the period	85	Number of manhours spent on tiling during the period	120
Productivity = Amount invoiced per manhour	\$ 12.47	Productivity = Amount invoiced per manhour	\$ 9.17
Loss of Productivity per manhour as a percentage of normal productivity	$(12.47 - 9.17) / 12.47$		26.49%
Real cost of tiling manpower in the area/period disrupted	120 x \$ 3		\$ 360
Additional Cost	26.49% x \$ 360		\$ 95.64

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Disruption or loss of efficiency:

- It is very important to have accurate and precise details of resources deployed by area, by period and by activity.
- The Engineer may issue the instructions as necessary for the Contractor to maintain and supply the needed information.
- If the Contractor is not cooperating, or as a measure of precaution, the Engineer may want to deploy the means necessary on Site to collect his own data.

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Disruption or loss of efficiency:

- Difficulty can arise if the Works are so disturbed that there is no zone or period of normal productivity on which to base a comparison.
- Under such circumstances, a comparison can be made with productivity achieved by the Contractor on other projects – but the Contractor has to prove that the other projects are closely similar:
 - in geographical environment,
 - in size,
 - in the kind of Works, etc.

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Disruption or loss of efficiency:

- When no such similar projects exist, reference can be made to published information concerning the losses of efficiency to be expected under given circumstances.
- Disruption evaluated on the basis of such general statistics must be supported by the best possible evidence from the project itself.

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Disruption or loss of efficiency:

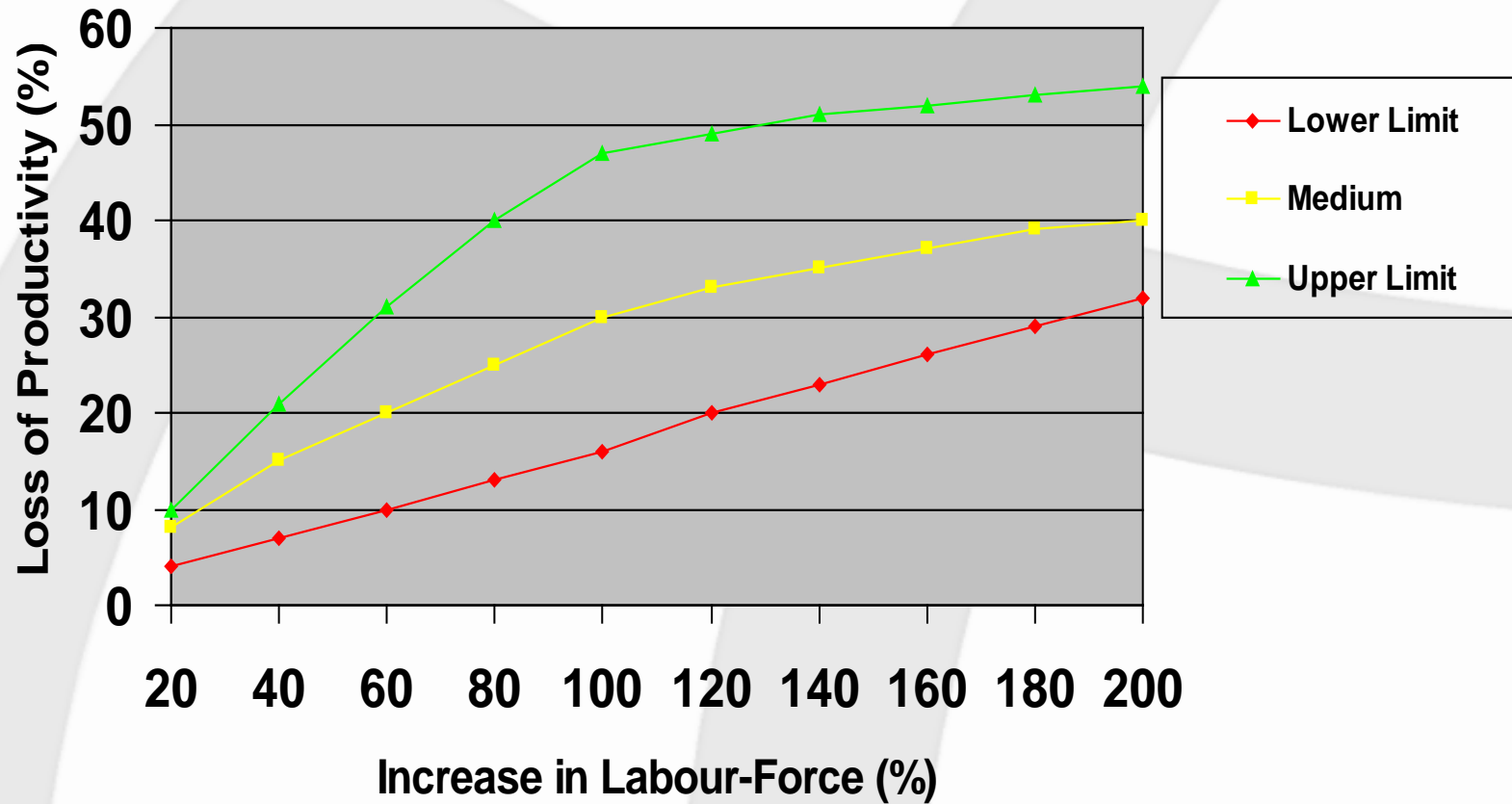
- If published information forecasts a loss of efficiency of about 25%, a comparison of actual productivity with that foreseen in the Contractor's tender must show a similar level of loss - after having taken account of events for which the Contractor is responsible, or his own causes of delay, such as equipment break-downs.
- In all evaluations of disruption, losses of productivity that are not the responsibility of the Employer must be removed.

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Effects of Acceleration Measures

- Acceleration measures can be relatively unproductive:
- A doubling of the labour-force does not cut the work duration by 50% - each worker achieves only 65% to 70% of his normal output, which yields a time-saving of 23% with a corresponding labour cost increase of 54%.

LOSS OF PRODUCTIVITY v INCREASE IN LABOUR-FORCE



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Example:

A task that is normally achieved by 60 men in 100 days, requires a total labour input of :

6000 man-days

After doubling the labour-force, productivity falls to 65 % of normal output, therefore the time needed to achieve the task becomes :

$$6000 / (120 \text{ men} \times 0.65) = 77 \text{ days}$$

$$\text{Reduction in duration} = 100 \text{ days} - 77 \text{ days} =$$

23 days or 23 %

$$\begin{aligned} \text{Increase in the labour cost} = \\ (120 \text{ men} \times 77 \text{ days}) - (60 \text{ men} \times 100 \text{ days}) = \end{aligned}$$

3240 man-days or 54 %

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Avoid 'Global Claims'

- The Contractor normally must prove that every cause of delay/additional Costs from which he has suffered gives him the right to claim;
- He must eliminate the effects of every significant cause of delay/additional Costs which is not due to the Employer; but:
- If it is not possible to eliminate every cause which is not the liability of the Employer, there is some jurisprudence whereby there can be an apportionment of responsibility between the two Parties.

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Go to examples of disruption records

Variations and Adjustments

- The principles of evaluation of the Variation in descending order are:
 - Variations are to be valued at the Contract's rates and prices;
 - if the Contract has no rates & prices for the varied work, Contract rates & prices are to be used as the basis for developing new rates (enhanced or star rates);
 - failing which, after due consultation by the Engineer, suitable rates or prices shall be agreed on the basis of reasonable Costs plus Profit.

(PB and 2017 RB Sub-Clause 12.3)

Variations and Adjustments

- In the event of disagreement the Engineer shall agree or fix such rates and prices and shall notify the Contractor and the Employer.
- **Until rates or prices are agreed or fixed, the Engineer shall determine provisional rates to enable the Engineer's certification of on-account payments to the Contractor.**
- If an instruction to vary the Works is necessitated by some default or breach of Contract by the Contractor or for which he is responsible, any additional cost so attributable shall be borne by the Contractor.

Delay Damages

- If the Contractor fails to complete within the Time for Completion (after taking account of any entitlement to extensions of time), he must pay delay damages to the Employer, at the rate stated in the Contract.
- **PB:** The Employer shall not be entitled to the delay damages unless he issues a notice to the Contractor within the 28 days' limit set out in Sub-Clause 2.5. Note however that this is not a time bar.
- **2017 RB:** The Notice is now to be given under Sub-Clause 20.2.1 and it is subject to time bar in the 2017 edition.

Thank You!