

NEC Asia Pacific Users' Group Workshop 2014

Keeping the Programme Up to Date

Workshop Agenda

- Programme requirements within ECC contract
- Types of float + critical path
- Time risk allowance
- Issues associated with planning under ECC
- Early warnings & Key Dates
- Compensation events and effect on Completion Date
- Programme submissions + reporting

Workshop Objectives

- Review how a programme can be constructed from first principles in order to fulfil its potential as a real management tool
- Consider how to manage the programme to maximise its success on an NEC form of contract project.

NEC Contract

Clause 31 – The programme

Issues with other forms of contract and management of programme:

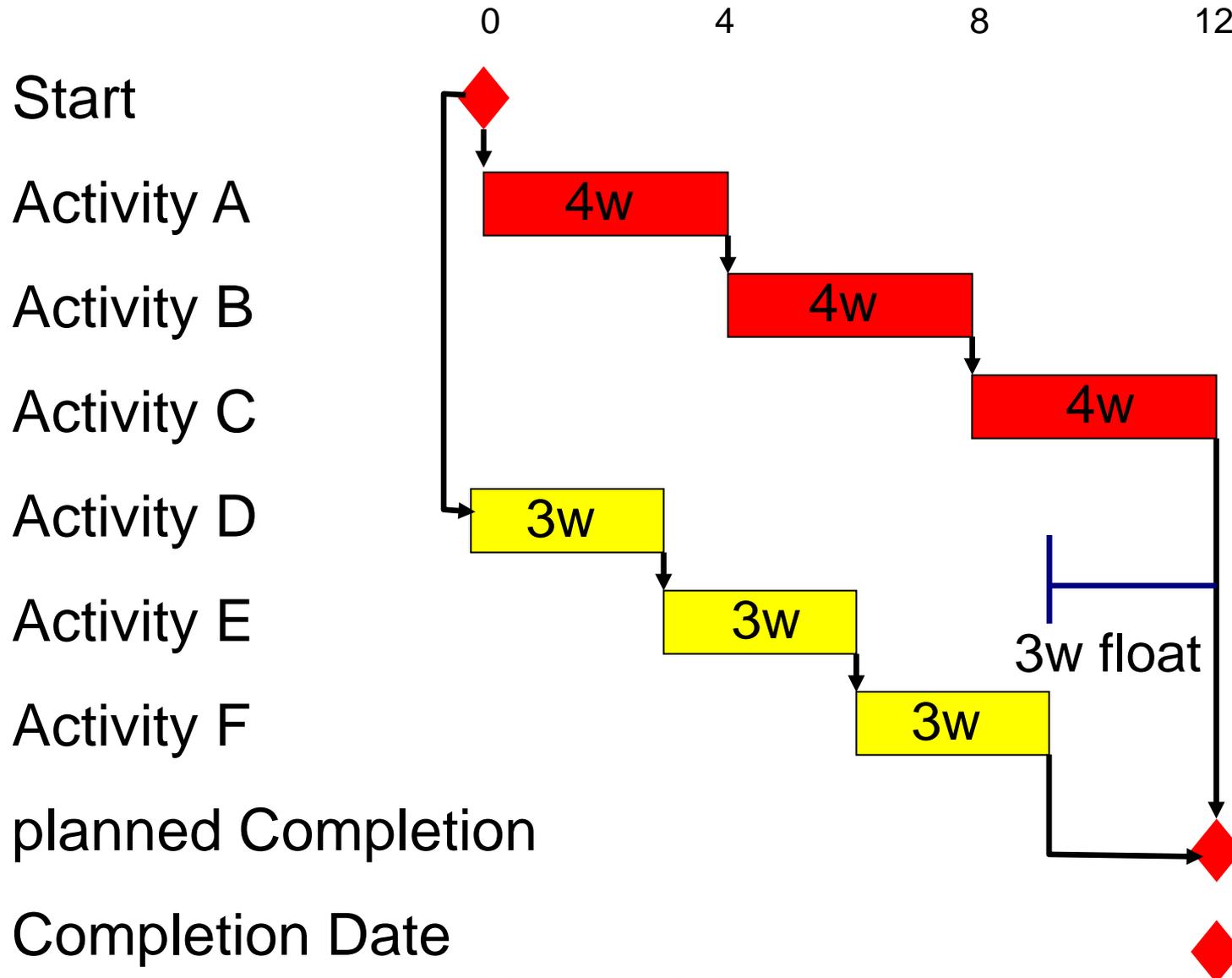
- Retrospective analysis of time delay and entitlement – subjective to say the least!
- No firm requirement on how to manage programme during contract
- Often comparing current programme to original baseline programme (which has no resemblance as to how works now being done).

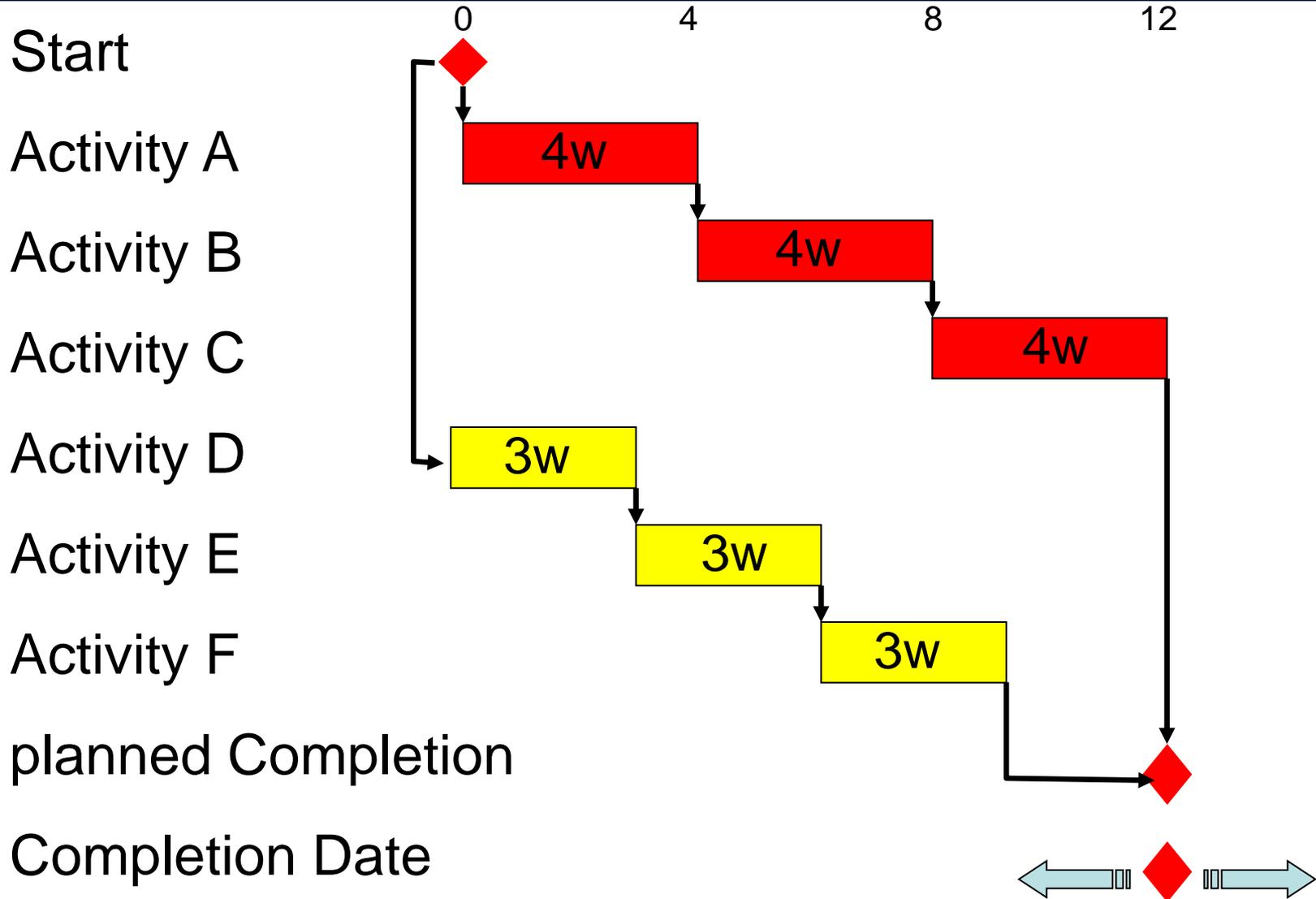
Clause 31 – The programme

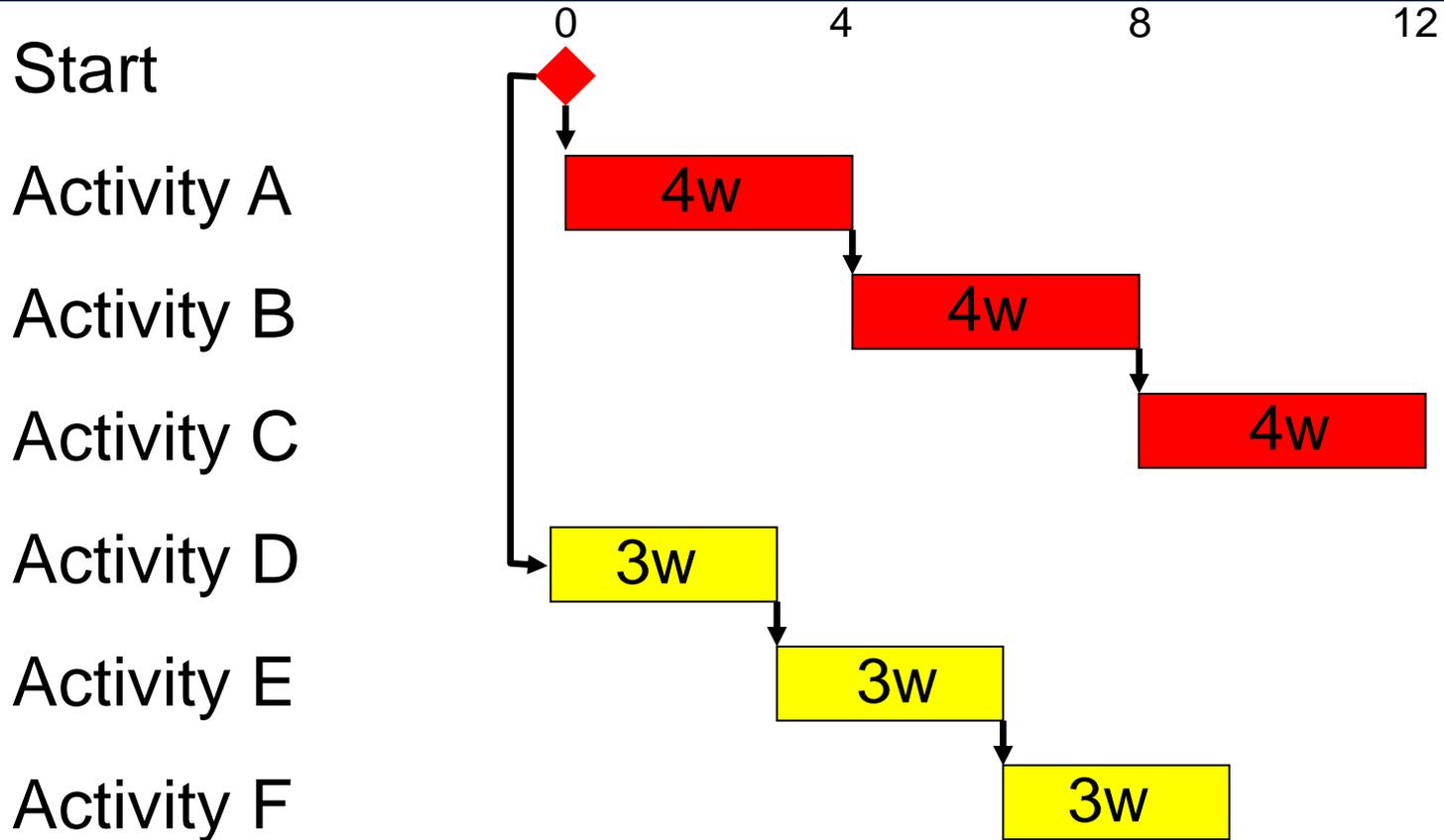
31.2 - Items to be shown on the programme include:

- *starting date*/Completion Date/Key Dates
- planned Completion

Planned Completion / Completion Date

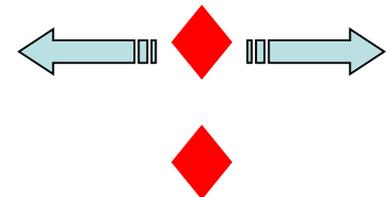






planned Completion

Completion Date



Clause 31 – The programme

31.2 - Items to be shown on the programme include:

- *starting date/Completion Date/Key Dates*
- planned Completion
- order and timing of operations to Provide the Works
- float
- time risk allowances
- health and safety requirements
- Plant & Materials from *Employer*
- acceptances
- information from Others
- statements of how the *Contractor* plans to do the work

Clause 31 – The Programme

- programme more than just a bar chart – collection of documents
- 25% of Price for Work Done to Date deducted until first programme submitted showing the information the contract requires (50.3)
- Acceptance within period stated in Contract Data

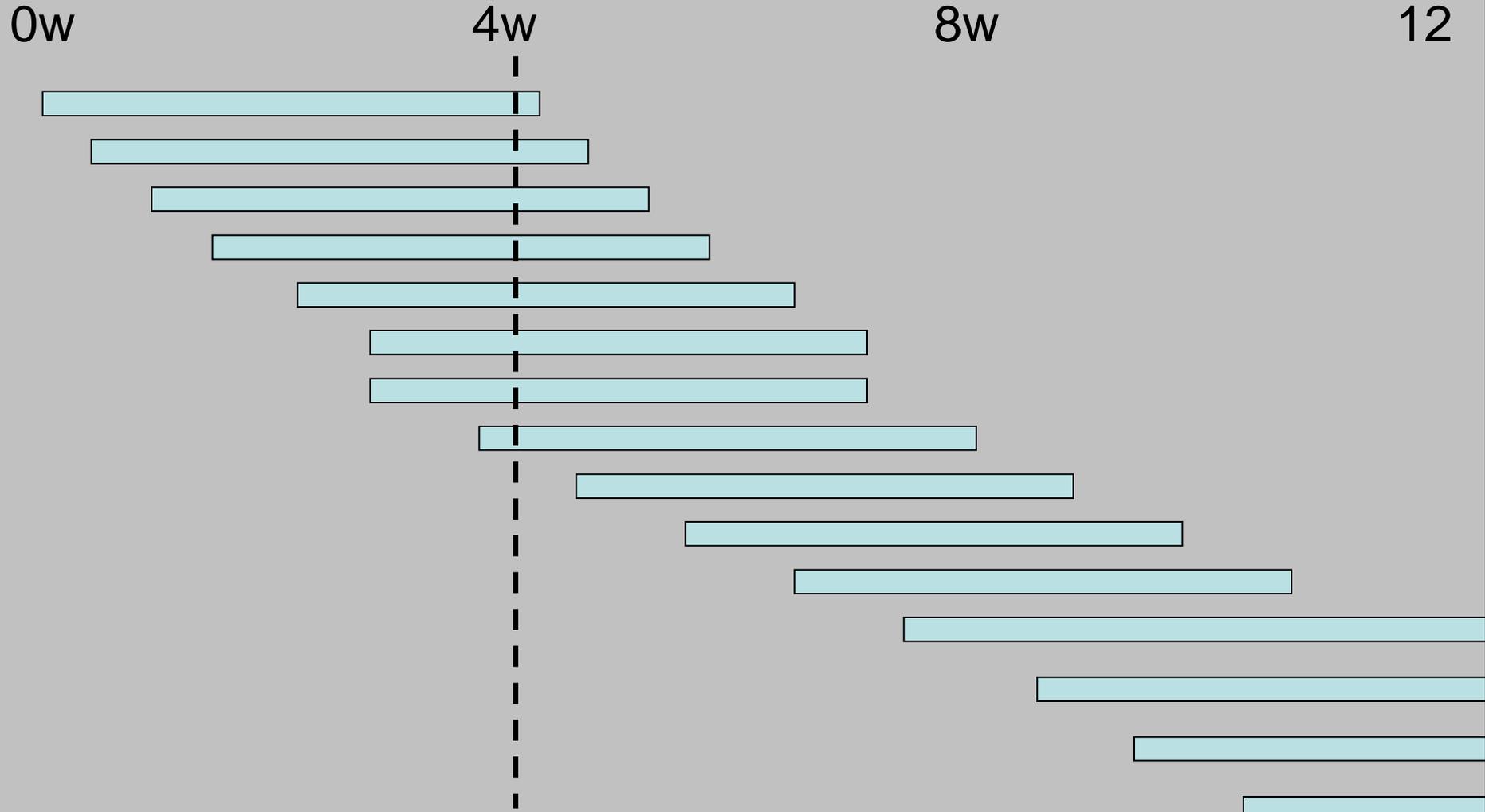
Under clause 31.3 there are only four reasons not to accept a programme:

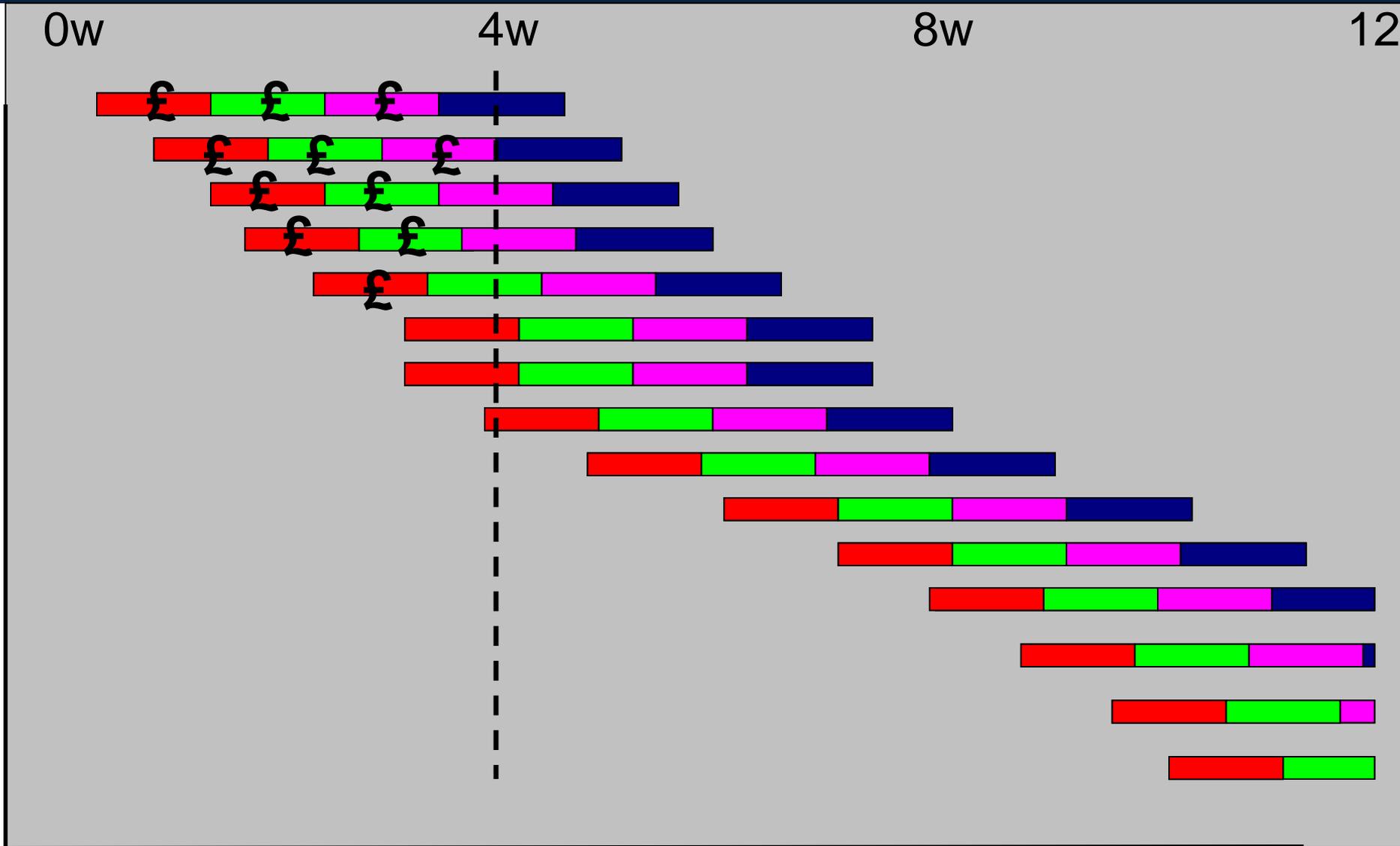
- The *Contractor's* plans which it shows are not practicable
- It does not show the information which this contract requires
- It does not represent the *Contractor's* plans realistically or
- It does not comply with the Works Information

If the *Project Manager* withholds acceptance for a reason not stated in contract it is a compensation event under clause 60.1(9)

Acceptance of a programme by the *Project Manager* is not a condition precedent to the *Contractor* proceeding with the work

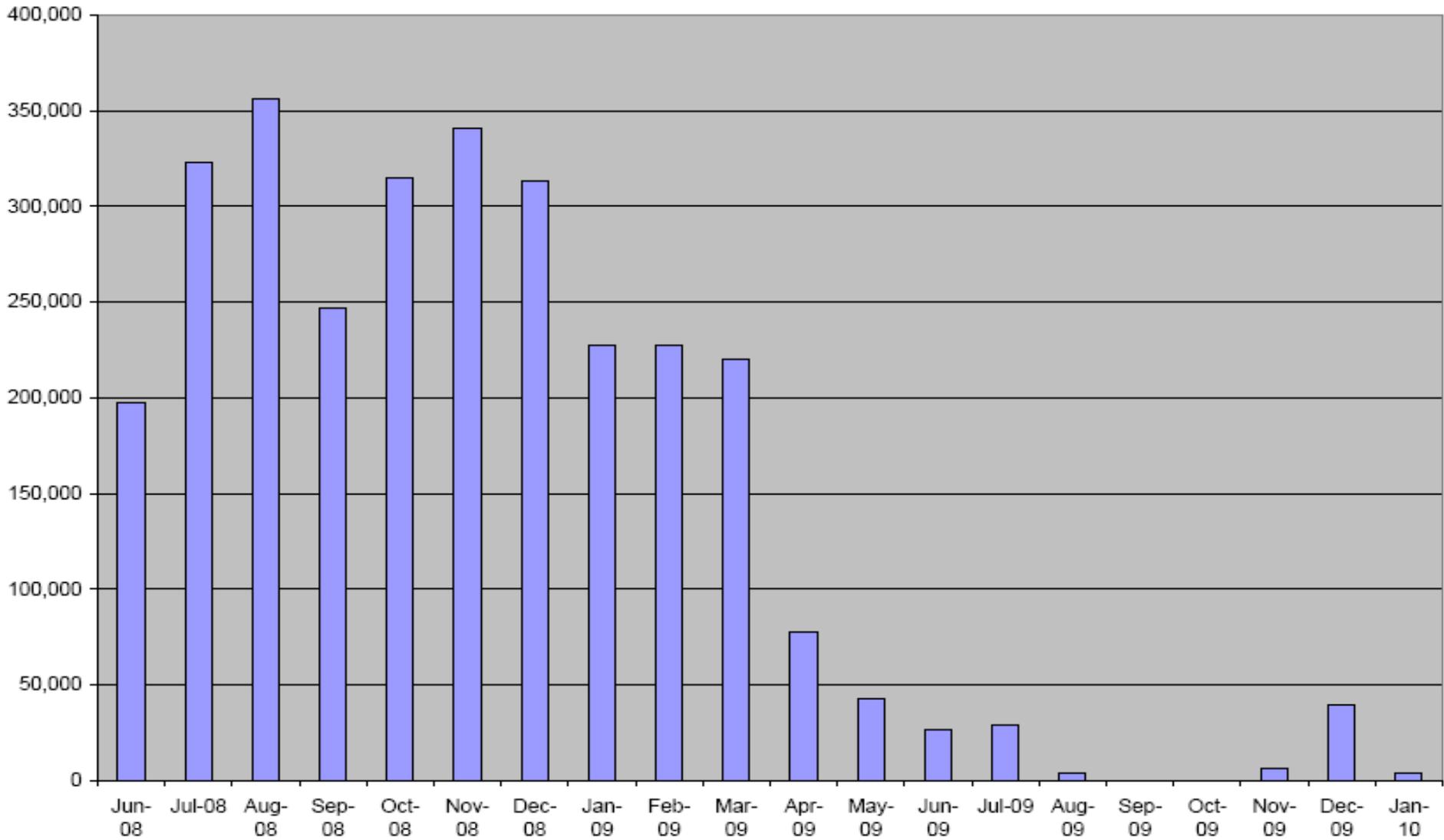
- 31.4 The Contractor provides information which shows how each activity on the Activity Schedule relates to the operations on each programme which he submits for acceptance
- 11.2(27) states that the Price for Work Done to Date is the total of the Prices for completed activities on the activity schedule
- Given that Price for Work Done to date assessed every say four weeks, what is the maximum length of activity duration that you would want on a programme?





Activity ID	Activity Name	Budgeted Total Co	Forecast Finis
CRF0050	Procurement Complete	£6,900.00	
Q1925	Prepare Cores & Trial Holes works MS (Whitechapel)	£10,000.00	04-Apr-08 A
Q2035	Prepare Cores & Trial Holes works MS (Liverpool St)	£10,000.00	04-Apr-08 A
Q2045	Prepare Cores & Trial Holes works MS (Barbican)	£10,000.00	04-Apr-08 A
Q1935	Develop Detailed Delivery Prog	£5,000.00	28-Mar-08 A
A1030	Prepare Quality Plan (Submitted 25/3)	£5,000.00	25-Mar-08 A
CRF0180	CC017 - OAN & Storage Licence applications - Barbican	£5,000.00	14-Apr-08 A
CRF0135	Utilities Search for Farringdon station	£5,000.00	18-Apr-08 A
CRF0060	Procure Sub-contractor	£5,000.00	
CRF3220	Prepare CDS for Temp Works	£4,800.00	31-Mar-08 A
CRF3200	Prepare CDS for Trial Holes	£4,800.00	31-Mar-08 A
CRF3700	Mobilisation	£2,865.22	02-Jun-08
CRF3255	WHI-0096 Cores 2 No, D124B South facing side	£5,811.96	04-Jun-08
CRF3260	WHI-0096 Cores 2 No, D124B North facing side	£6,032.96	08-Jun-08
CRF3265	WHI-0096 Cores 2 No, D124 South facing side	£5,541.96	10-Jun-08
CRF3270	WHI-0096 Cores 2 No, D124 North facing side	£5,541.96	12-Jun-08
CRF3410	WHI-0096 Cores 2 No, D124A South facing side	£6,031.96	16-Jun-08
CRF3420	WHI-0096 Cores 2 No, D124A North facing side	£5,541.96	18-Jun-08
CRF3585	WHI-0039-WHI-0040 Cores 2 No, in-between 2 bridges, pl 6	£6,031.96	22-Jun-08
CRF3595	WHI-0039-WHI-0040 Cores 2 No, in-between 2 bridges, pl 6	£6,031.96	24-Jun-08
CRF3600	WHI-0039-WHI-0040 Cores 2 No, pl 5 beneath bridge	£6,031.96	26-Jun-08
CRF3605	WHI-0039-WHI-0040 Cores 2 No, pl 5 beneath bridge	£6,031.96	30-Jun-08
CRF3610	WHI-0039-WHI-0040 Cores 2 No, pl 5 beneath bridge	£6,031.96	02-Jul-08
CRF3615	WHI-0039-WHI-0040 Cores 2 No, pl 6 beneath bridge	£6,031.96	06-Jul-08
CRF3620	WHI-0039-WHI-0040 Cores 2 No, pl 6 beneath bridge	£6,031.96	08-Jul-08
CRF3625	WHI-0039-WHI-0040 Cores 2 No, pl 6 beneath bridge	£6,031.96	10-Jul-08
CRF3630	WHI-0039-WHI-0040 Cores 2 No, pl 6 next to stairs	£6,031.96	14-Jul-08
CRF3635	WHI-0039-WHI-0040 Cores 2 No, pl 6 next to stairs	£6,031.96	16-Jul-08
CRF3640	WHI-0039-WHI-0040 Cores 2 No, pl 5 next to stairs	£6,031.96	20-Jul-08
CRF3590	WHI-0038-WHI-0040 Trial Hole 1 No, 9.2m from Durward St Br	£5,742.96	22-Jul-08
CRF3645	WHI-0039-WHI-0040 Trial Hole 1 No, in-between 2 bridges, pl 6	£8,127.96	24-Jul-08
CRF3650	WHI-0039-WHI-0040 Trial Hole 1 No, in-between 2 bridges, pl 5	£8,127.96	28-Jul-08
CRF3655	WHI-0039-WHI-0040 Trial Hole 1 No, pl 6 next to stairs	£8,127.96	30-Jul-08
CRF3660	WHI-0039-WHI-0040 Trial Hole 1 No, pl 5 next to stairs	£8,127.96	03-Aug-08

Warren Street Tender Programme - Activity Schedule Profile



Clause 32 - Revising the programme

32.1 - *Contractor* shows on each revised programme:

- actual progress achieved on each operation activity and affect upon remaining work
- effects of implemented compensation events
- how *Contractor* plans to deal with any delays and to correct notified Defects
- any other changes that *Contractor* proposes to make

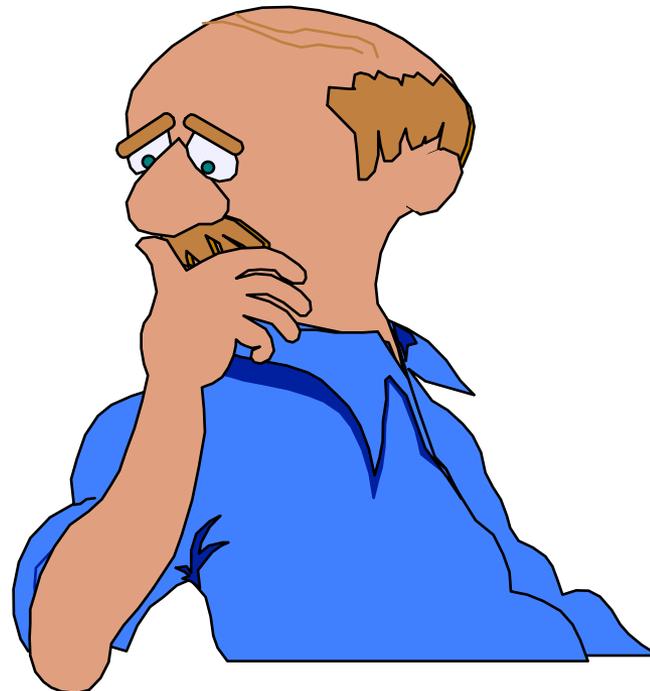
32.2 – *Contractor* submits a revised programme:

- Within the *period for reply* after *Project Manager* has instructed
- When the *Contractor* chooses to
- At no longer interval than stated in the contract

Where are the risks?

How long will it take?

What are the priorities?



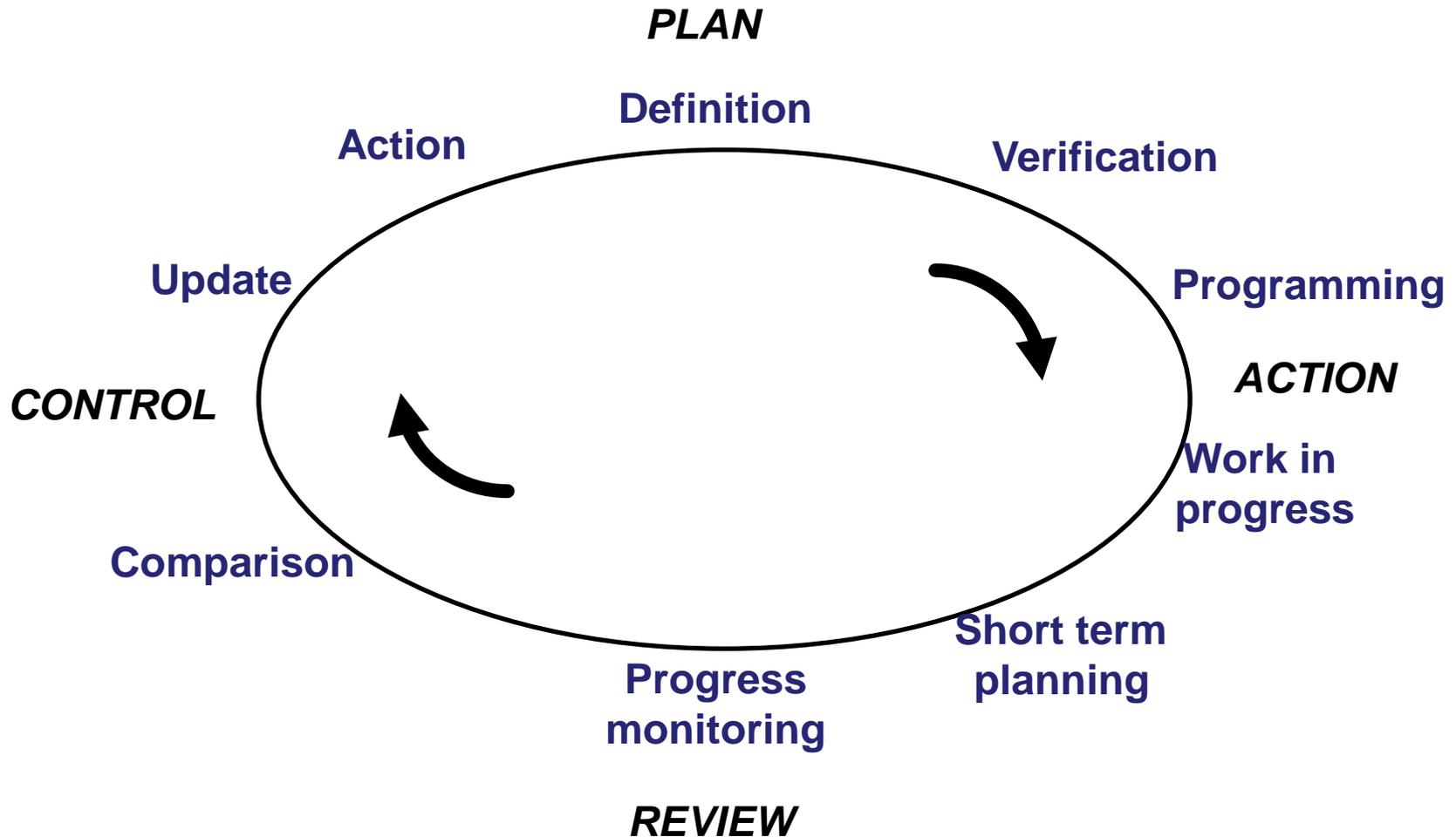
How much will it cost?

What if things change?

What resources will I need?

What are the alternatives?

The Planning Cycle



Health & Safety

Req'ments

Time risk allowance

Planned Completion and Completion Date

Terminal Float

Starting Date, Access Dates...

Activity ID	Activity Name	Duration	BL TRA	BL Start	BL Finish	Duration	2012												2013				2014				2015				2016				2017				2018		
							Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3						
DSD in Happy Valley Master Programme																																									
Key Dates																																									
A1200	Contract Date	0		15-Aug-12		0																																			
A1210	Starting Date	0		01-Sep-12		0																																			
A1220	Access Date (1)	0		01-Sep-12		0																																			
A1230	Access Date (2)	0		01-Apr-13		0																																			
A1240	Access Date (3)	0		01-Apr-14		0																																			
A1250	Planned Completion	0		30-Dec-17		0																																			
A1260	Completion Date	0		31-Mar-18		0																																			
Health & Safety																																									
A1270	1st Monthly SSMC Meeting	0		01-Sep-12		0																																			
A1280	2nd Monthly SSMC Meeting	0		03-Oct-12		0																																			
A1290	3rd Monthly SSMC Meeting	0		01-Nov-12		0																																			
Advanced Works																																									
A1000	Advanced Works (By HKJC)	201		01-Aug-11	31-Mar-12	201																																			
A1010	Advanced Works (By ASD)	392		01-Dec-11	28-Mar-13	392																																			
A1020	Advanced Works (Access Manhole)	221		01-Nov-11	31-Jul-12	221																																			
Storage Tank (Phase 1)																																									
A1030	Site Clearance	75	8	01-Sep-12	30-Nov-12	75																																			
A1040	Reprovision of LCSO water tank	26	3	01-Nov-12	30-Nov-12	26																																			
A1050	Stormwater Storage Tank (Phase 1 - 1st Stage) (Pitch 2 & Half of 3)	737	70	01-Nov-12	30-Apr-15	737																																			
A1060	Stormwater Storage Tank (Phase 1 - 2nd Stage) (Pitch 4 & Half of 3)	812	80	01-Feb-13	31-Oct-15	812																																			
Pumping System																																									
A1070	Construction of Pump House	445	45	01-Mar-14	31-Aug-15	445																																			
A1080	Surge Analysis	100	10	03-Oct-12	31-Jan-13	100																																			
A1090	E&M Works	601	05	01-Feb-13	30-Apr-15	601																																			
A1100	Commissioning of Pumping System	0		31-Mar-15		0																																			
Box Culvert & Stilling Basin																																									
A1110	Construction of Main Box Culvert	592	00	02-Jan-13	31-Dec-14	592																																			
A1120	Weir Penstocks	77	70	02-Jul-14	30-Sep-14	77																																			
A1130	Reinstatement of Jogging Trail	246	25	02-Jan-15	31-Oct-15	246																																			
A1140	Stilling Basin	249	25	01-Apr-14	31-Jan-15	249																																			
A1150	Reinstatement of Crescent Garden	49	5	01-Feb-16	31-Mar-16	49																																			
Flow Diversion																																									
A1160	Drainage Diversion at existing box culvert	440	45	02-Feb-15	30-Jul-16	440																																			
Storage Tank (Phase 2)																																									
A1170	Stormwater Storage Tank (Phase 2)	543	50	02-Nov-15	31-Aug-17	543																																			
Works at WNCR East																																									
A1180	Access Manhole at WNCR East	49	5	01-Sep-17	31-Oct-17	49																																			
A1190	Reinstatement of Carpark at WNCR East	50	5	01-Nov-17	30-Dec-17	50																																			

Activity relationship / Linkages

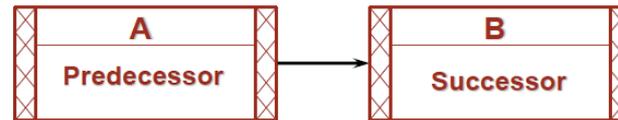
- There are four types of relationships.

Finish-to-Start (FS)	When A finishes, B can start.
Start-to-Start (SS)	When A starts, B can start.
Finish-to-Finish (FF)	When A finishes, B can finish.
Start-to-Finish (SF)	When A starts, B can finish.

Finish to Start (FS)

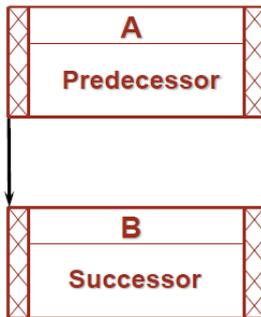
When A finishes, then B can start.

- Default relationship type in Primavera.



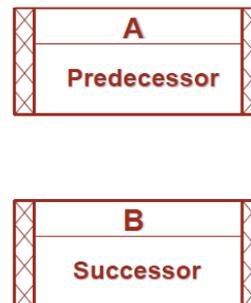
Start to Start (SS)

- When A starts, then B can start.



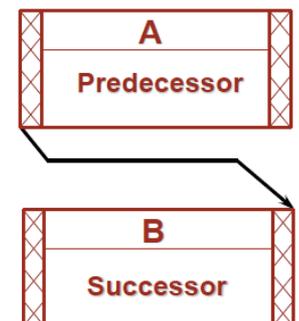
Finish to Finish (FF)

- When A finishes, then B can finish.



Start to Finish (SF)

- When A starts, B can finish.

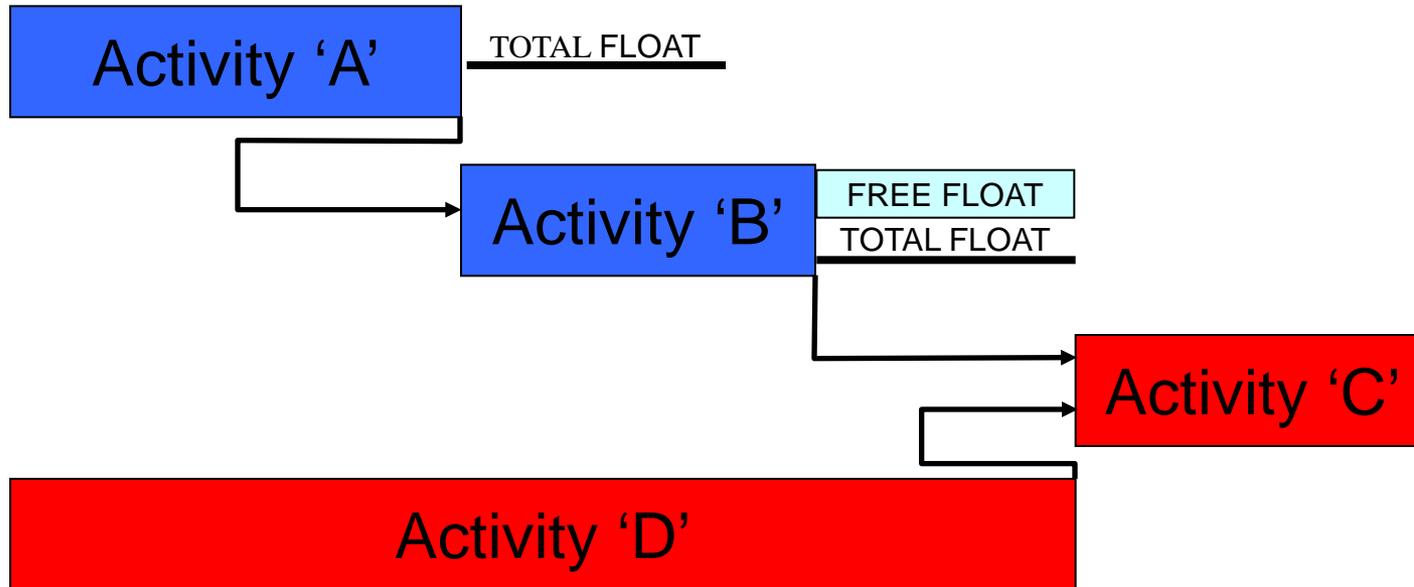


3 types of float recognised in NEC:

- Terminal Float – (between planned Completion date and the Completion Date)

- Time Risk Allowances

- Activity Float – (activities NOT on the critical path)
 - Free Float
 - Total Float



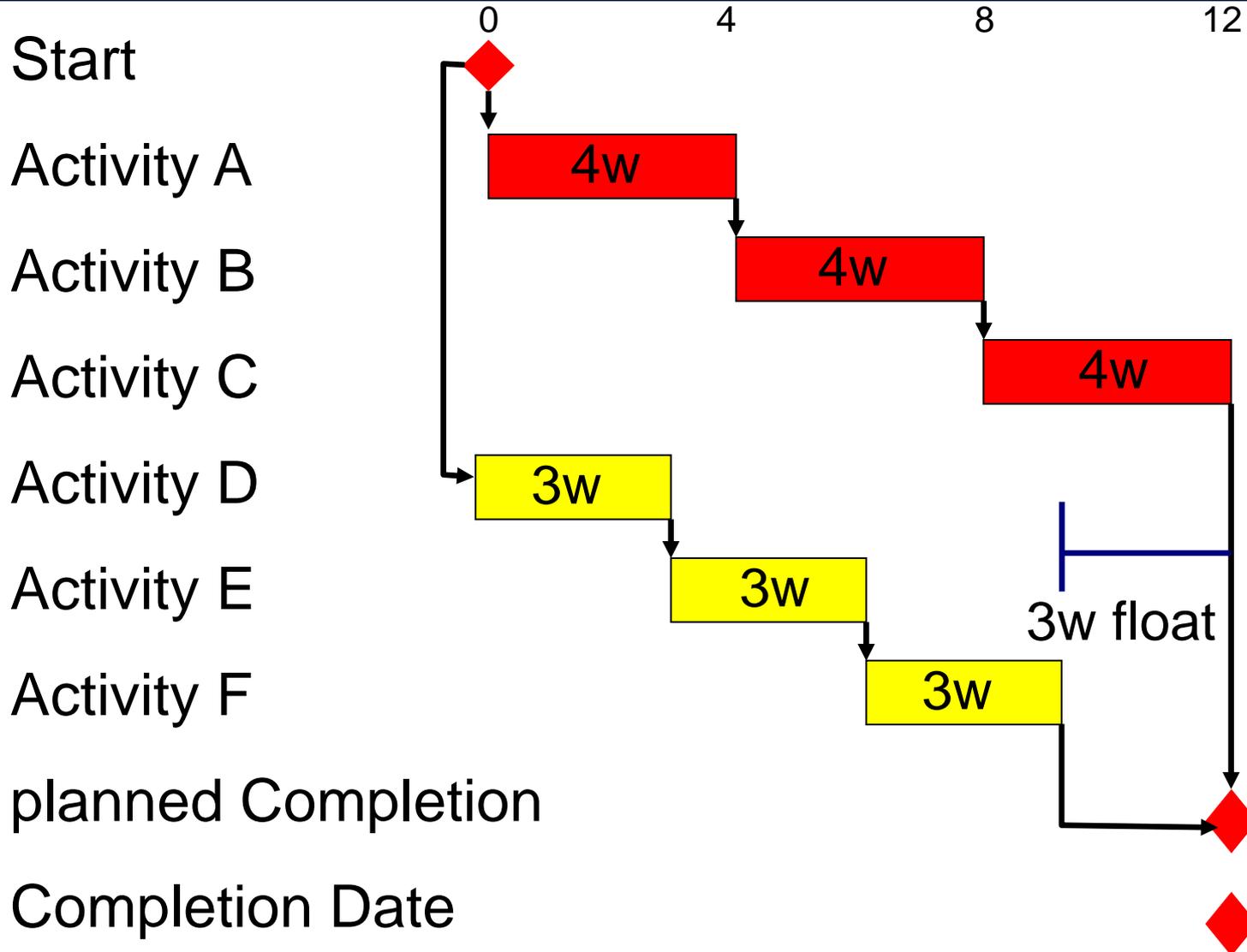
- Activity 'A' can move along its float & will move activity 'B'. When the end of the float is reached it becomes critical
- Is available to accommodate
 - the time effects of a compensation event
 - lack of progress by the *Contractor*

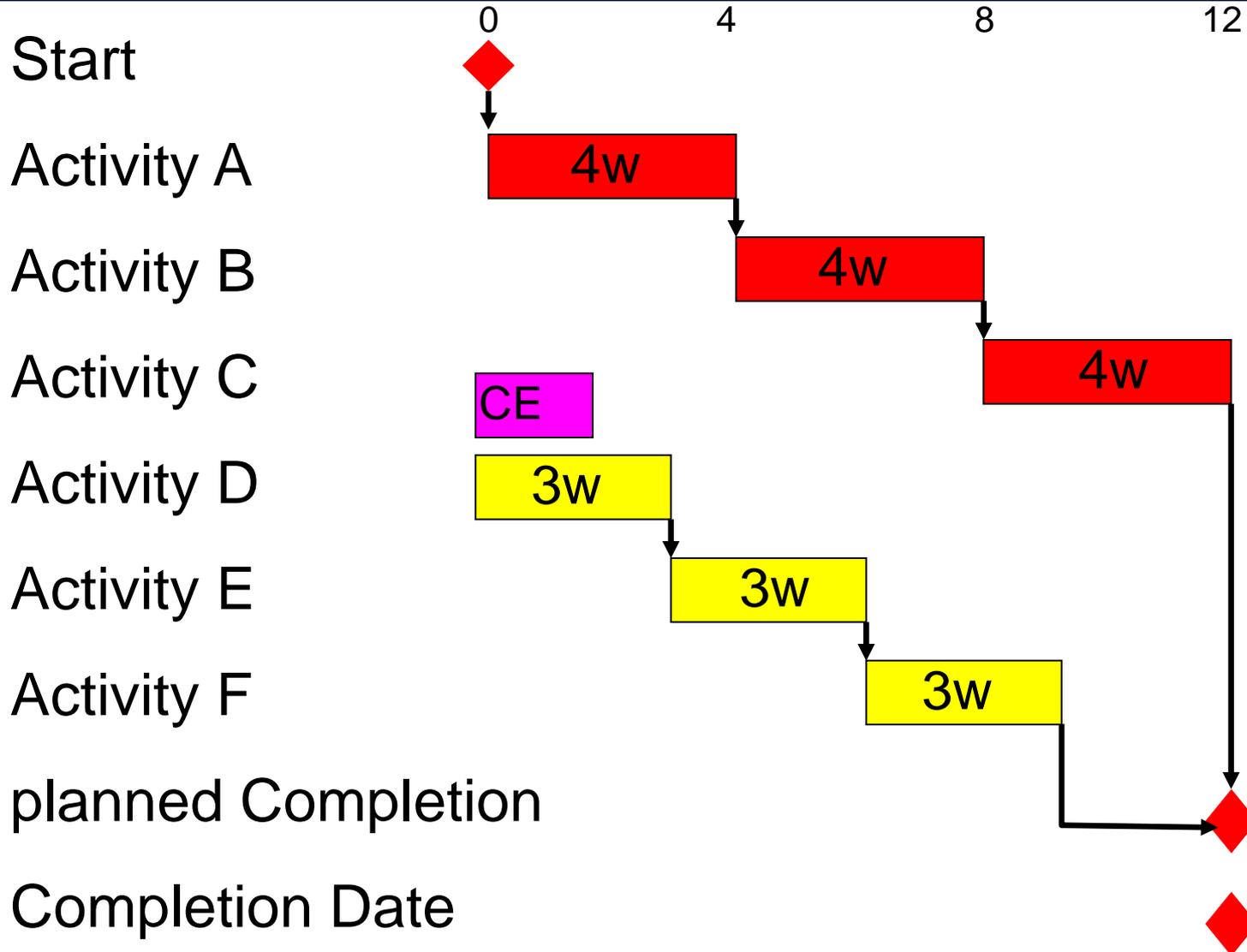
Ownership of Float

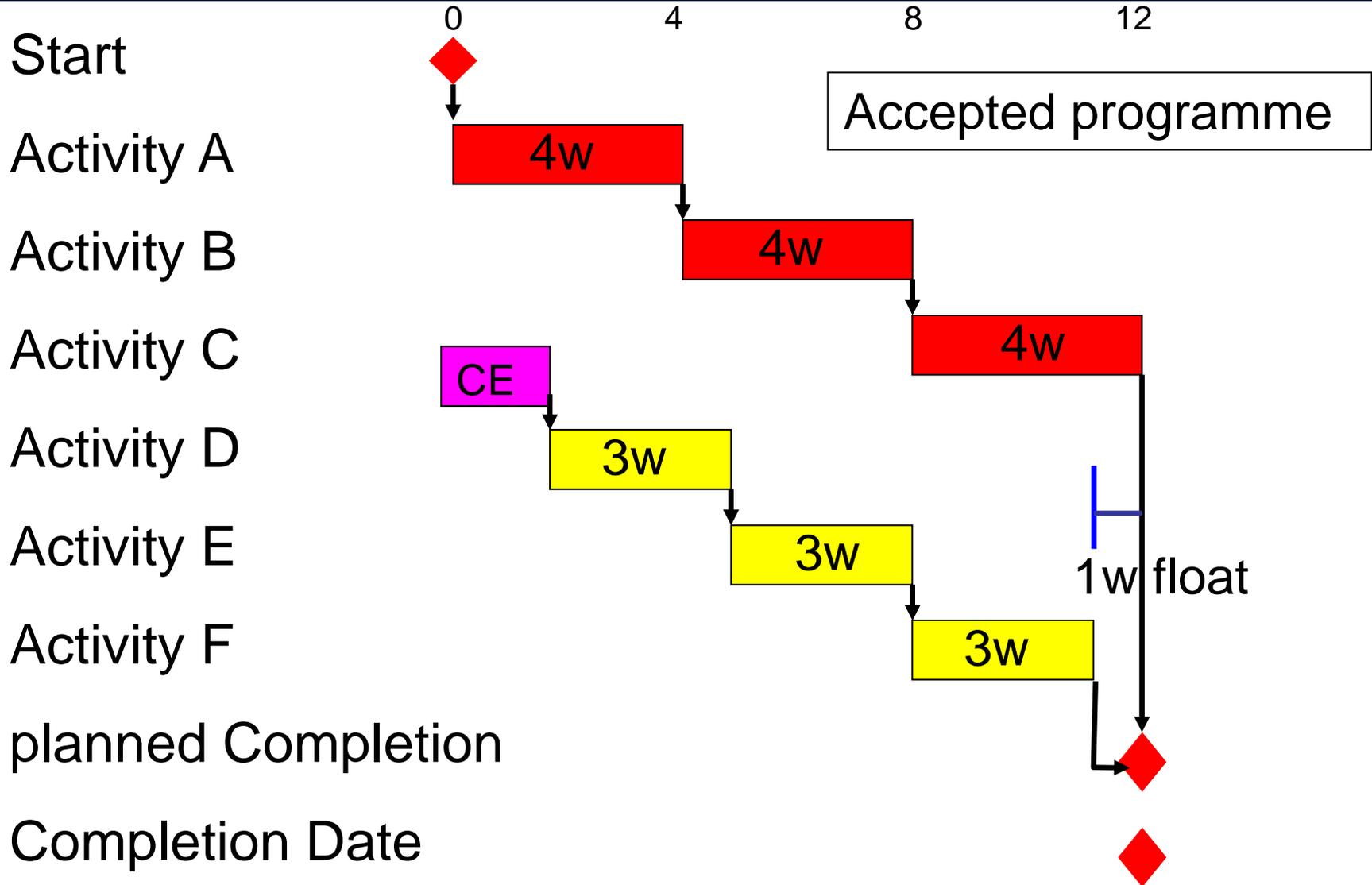
- Terminal Float – belongs to *Contractor*
- Contractor's Time Risk Allowance - belongs to *Contractor*
- Activity Float – “first come first served” basis

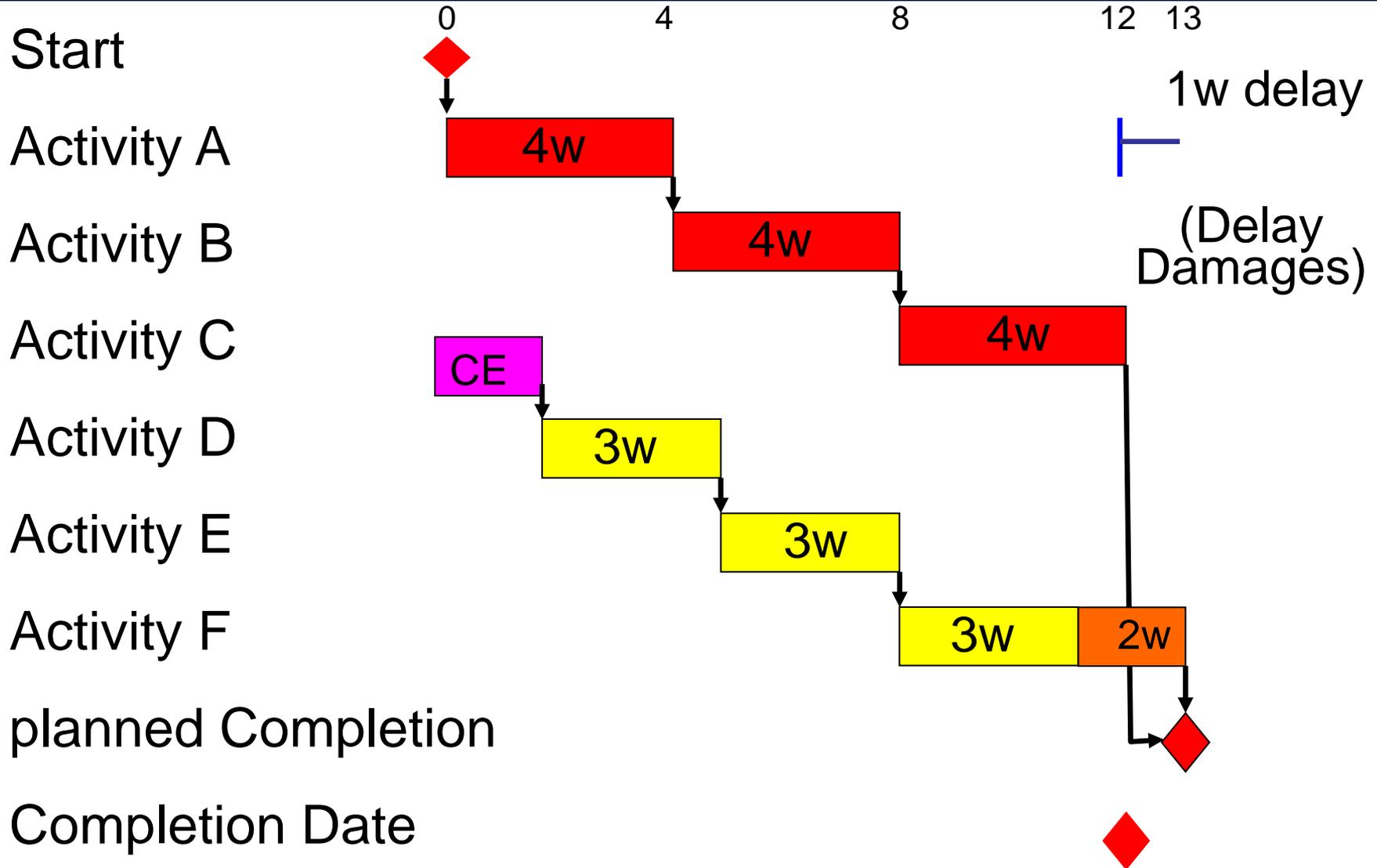
WHAT IS THE CRITICAL PATH?

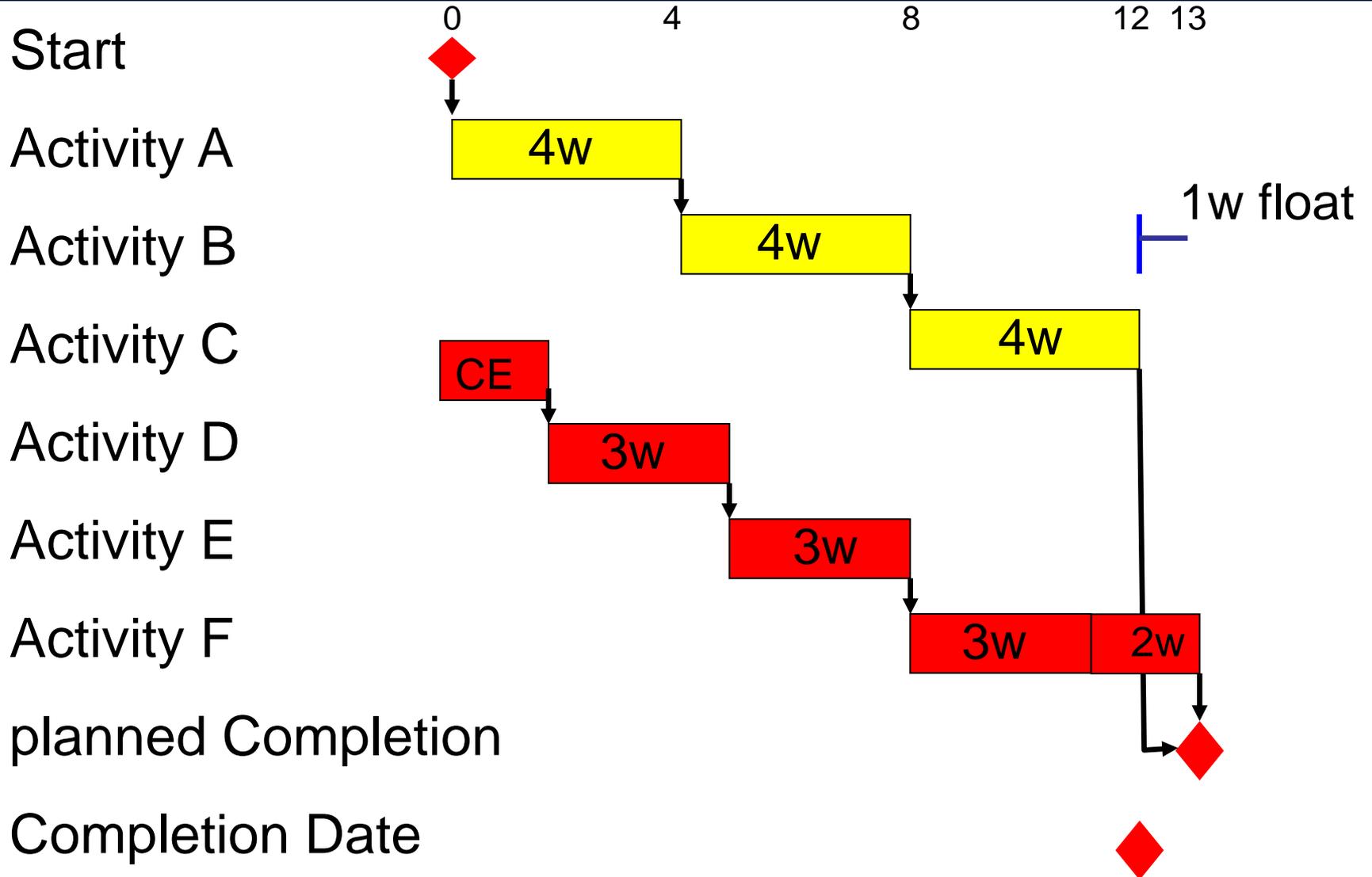
- the critical path is simply the longest path of work activities through the programme from start to end
- the critical path is the shortest duration of the contract programme
- critical path activities have no float

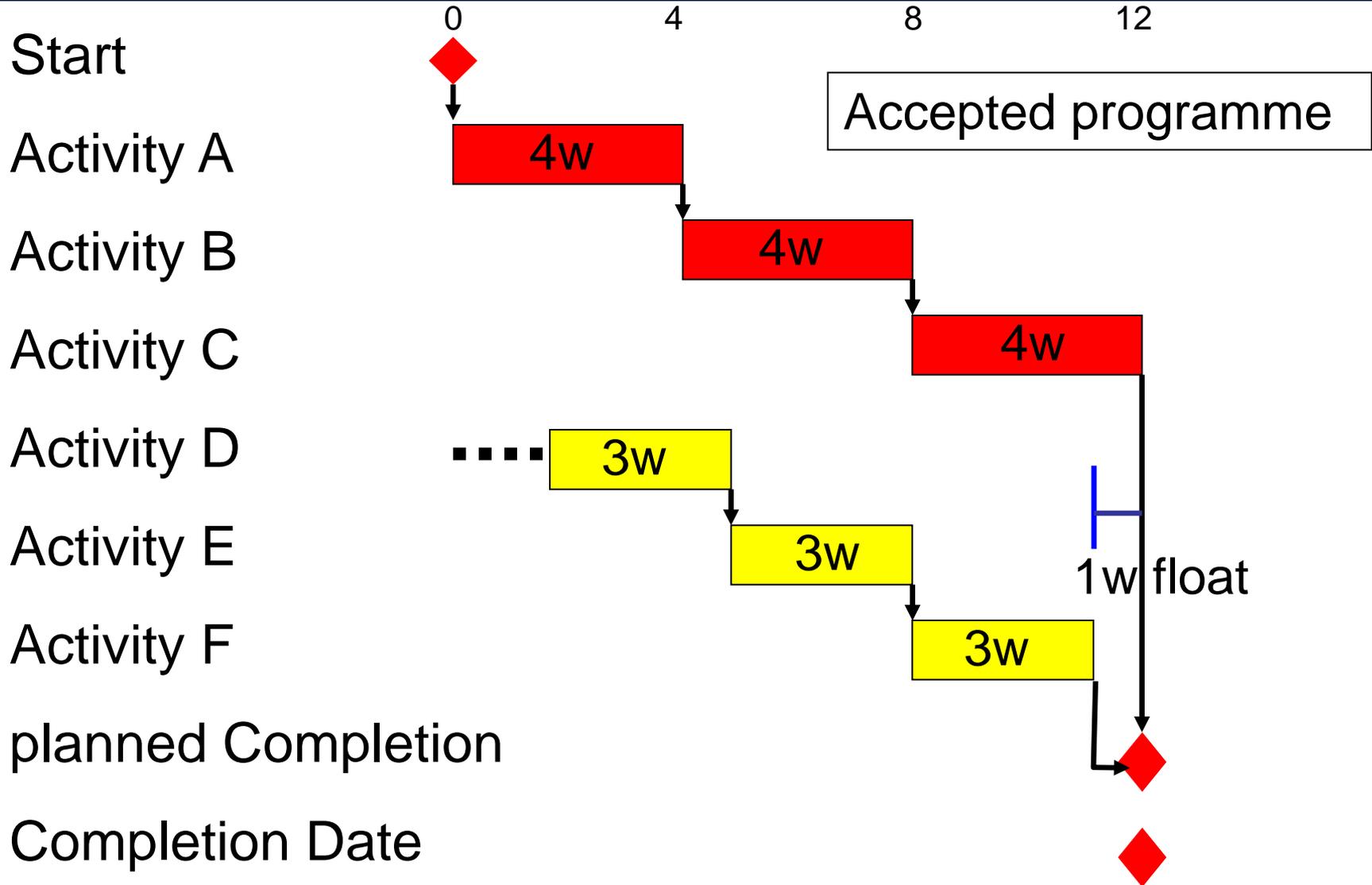


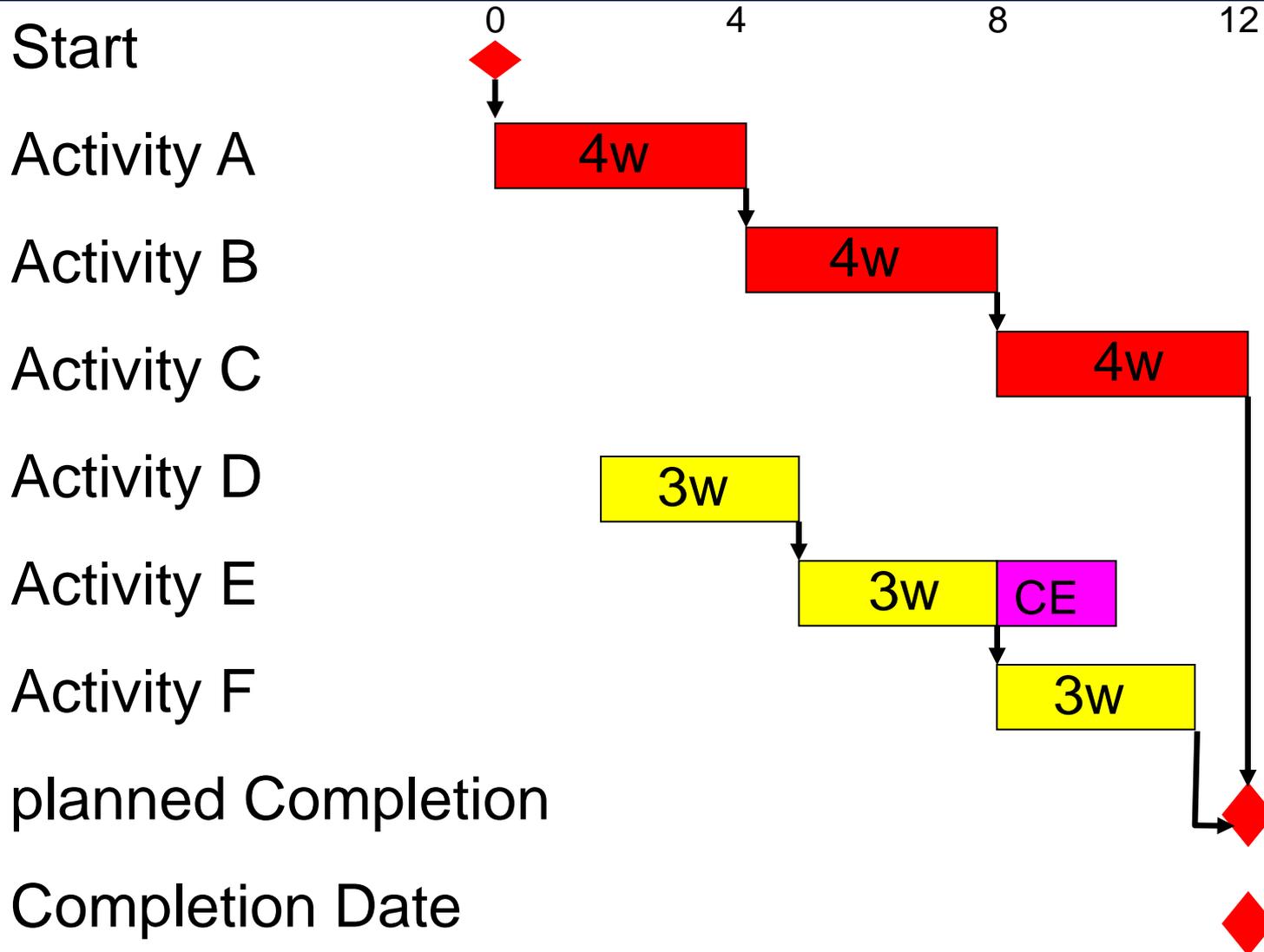


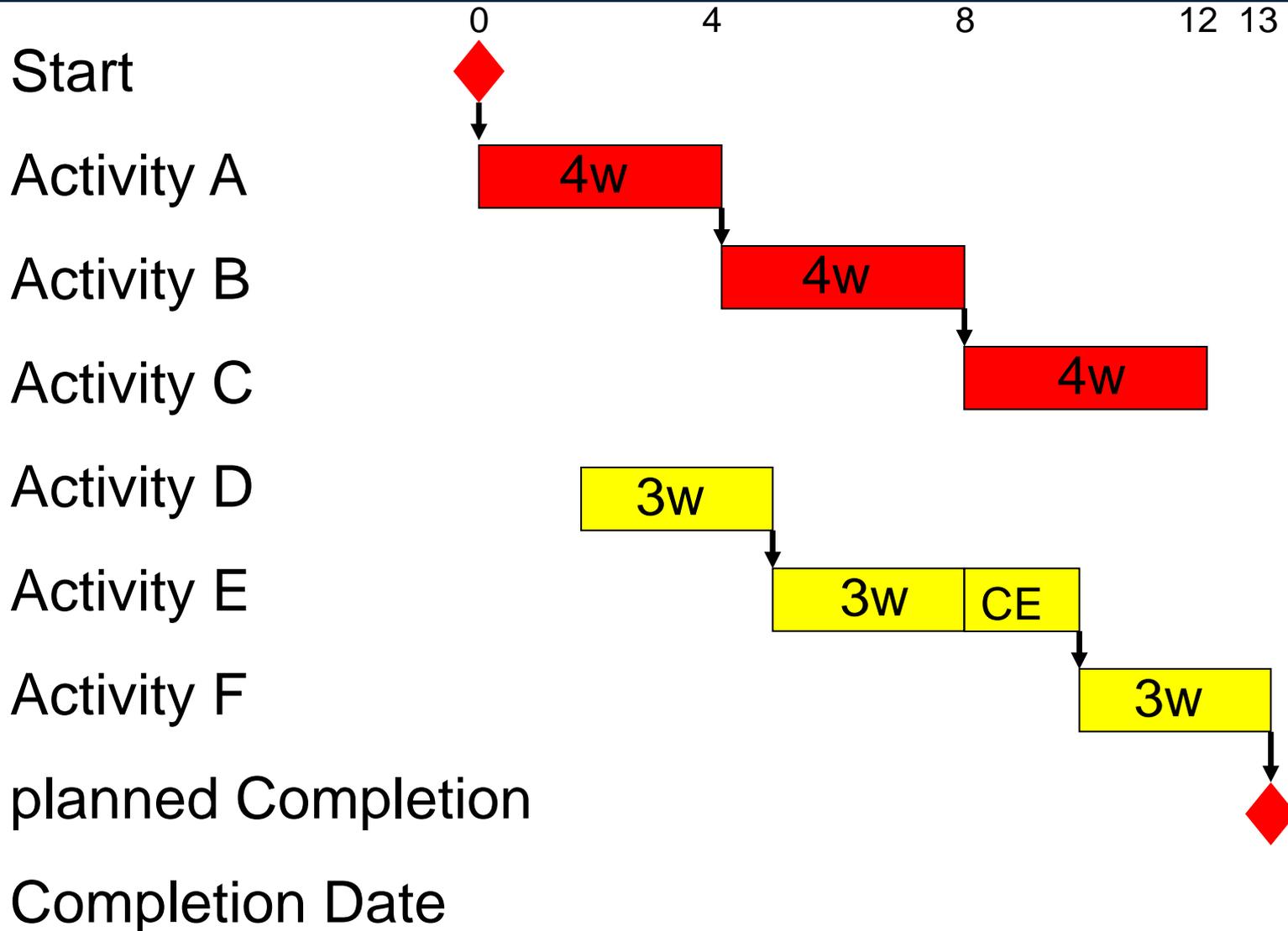


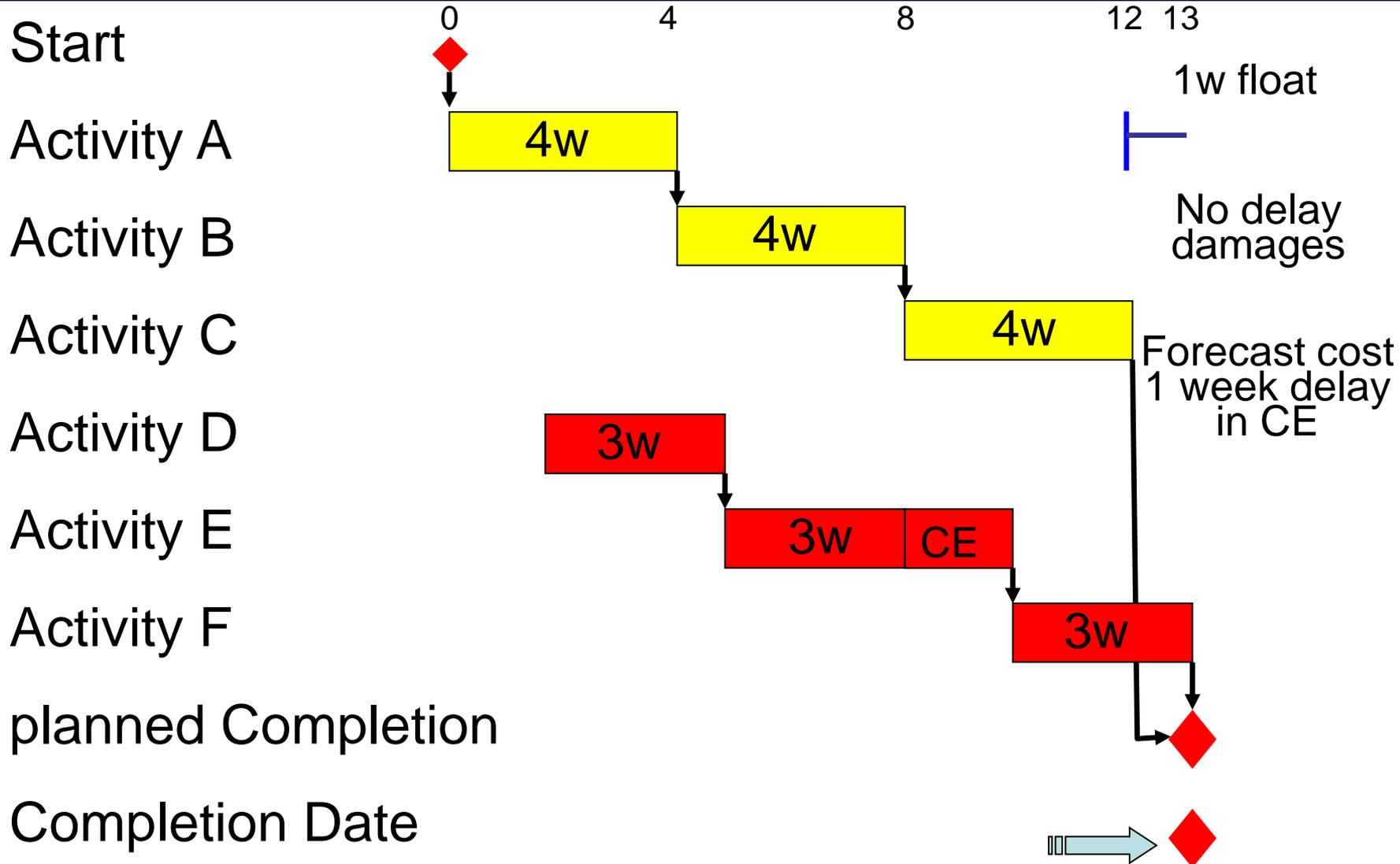












Total Float

- Float shared – whoever gets there first!
- Programme needs updated regularly (daily/weekly) to demonstrate true effect.

Time Risk Allowance

- Aim is to show that elements of risk have been applied to each operation. Are owned by the *Contractor* (to cover his risks)
- This gives some comfort to the *Employer* that particularly critical path is achievable
- Part of normal tender process i.e.
200m of pipe @ 15.5m/gang/day = 12.9 so say 15 days

Time Risk Allowance



Option 2 is labour intensive to produce and update and can be confusing as you have double the activities in the extreme

Time Risk Allowance

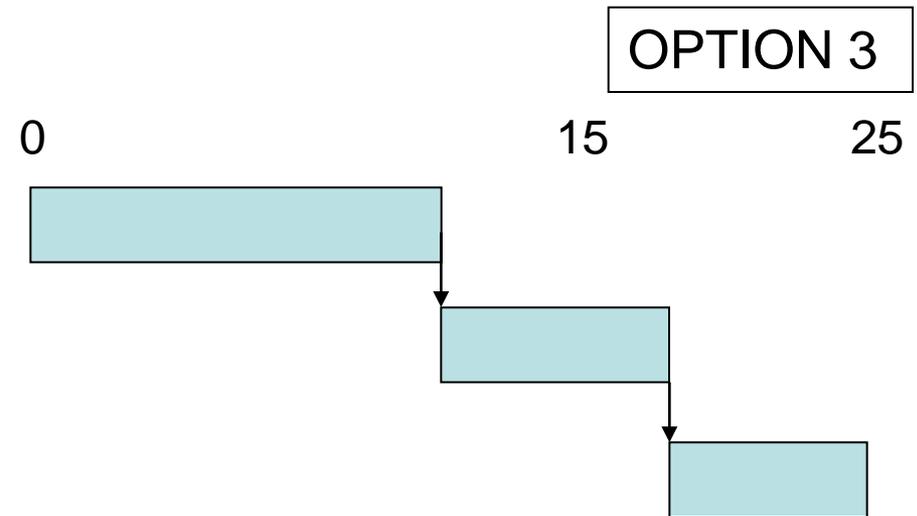


Activity	Duration
----------	----------

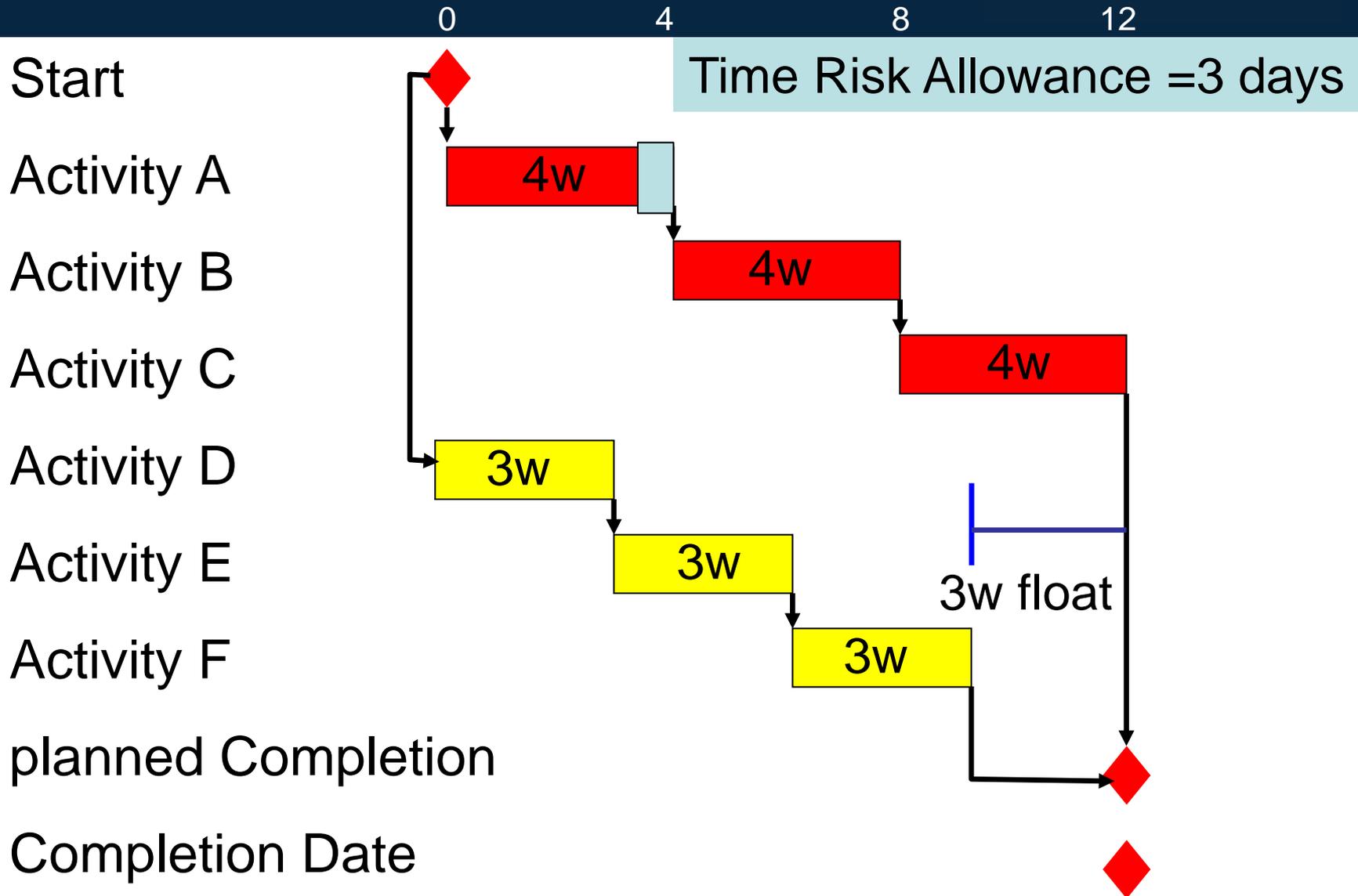
A	12
---	----

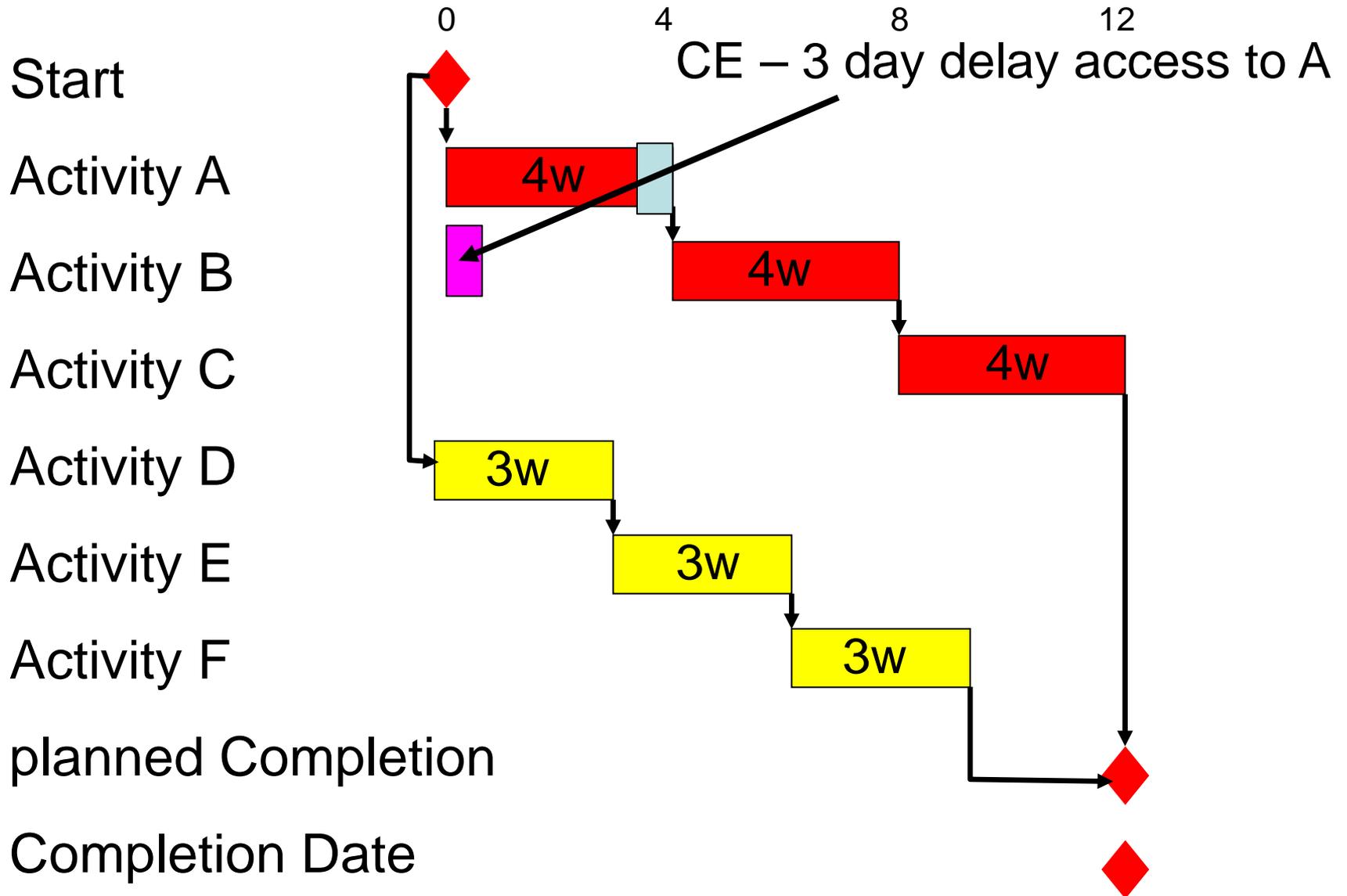
B	8
---	---

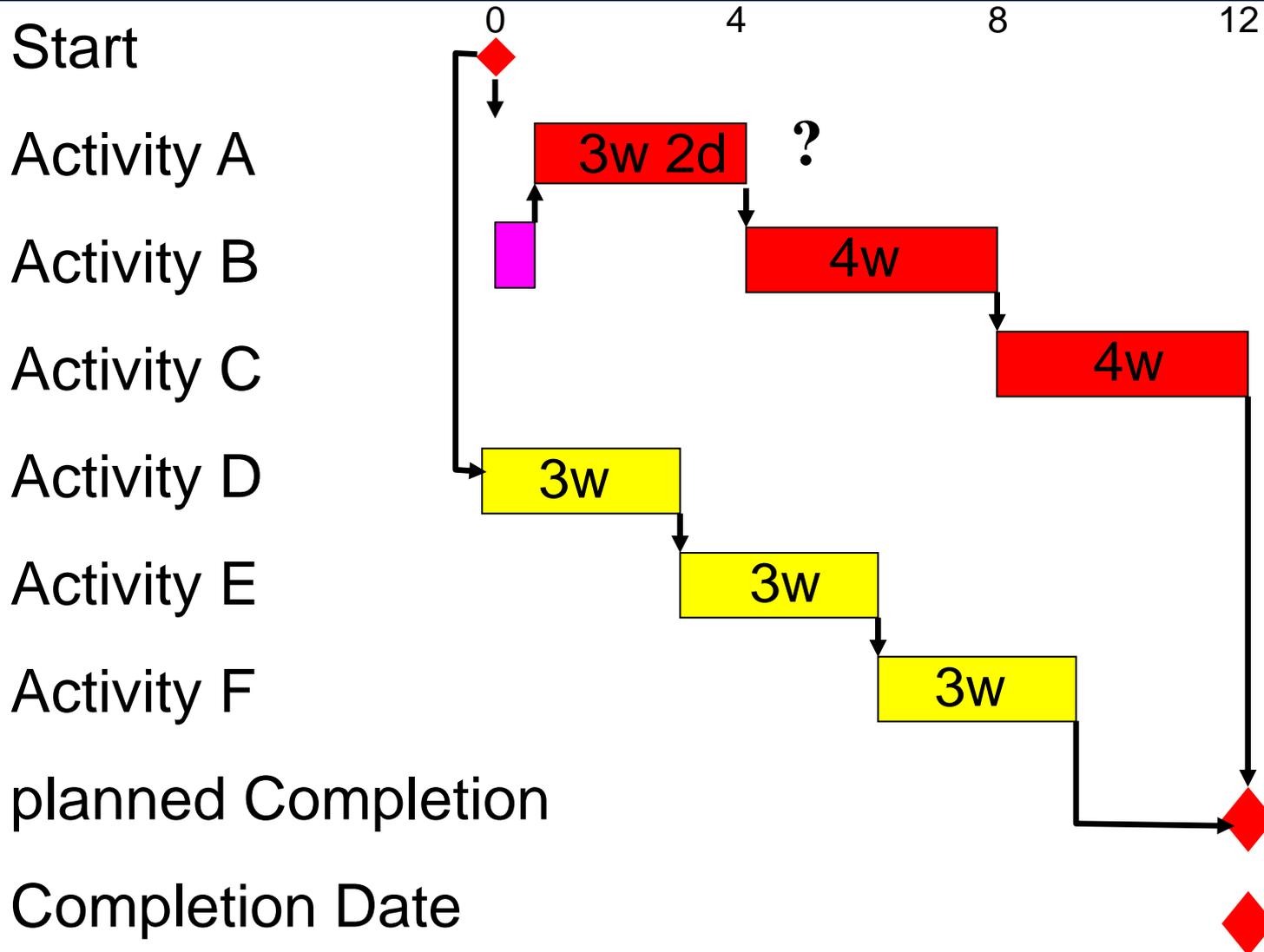
TRA	5
-----	---

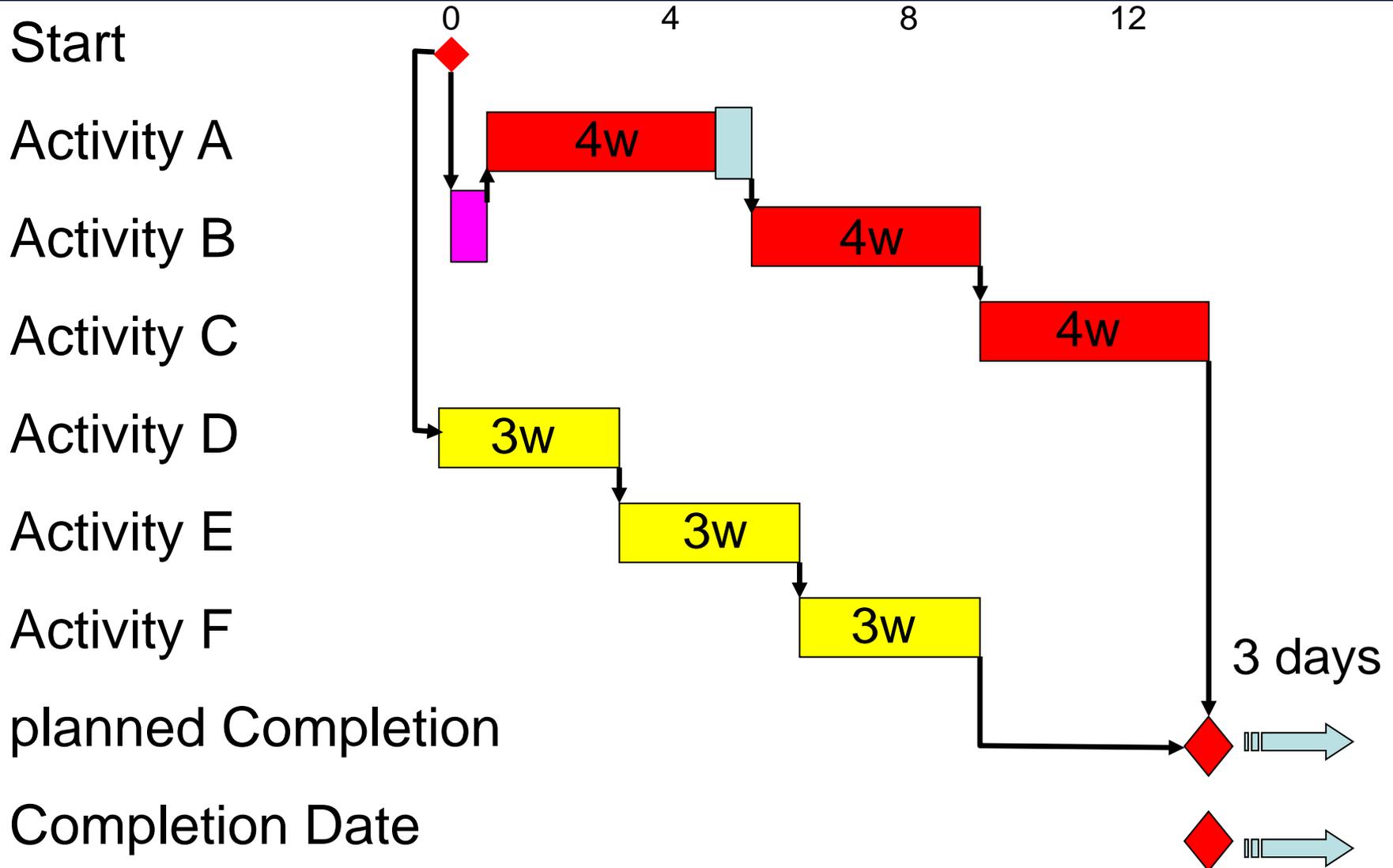


Option 3 at an initial glance may seem like a good idea to focus everyone's attention on the early dates. However, contractually it does not work on so many levels and any apparent benefits will be far outweighed by the problems that it causes. It is frankly an unnecessary approach anyway if the programme is being managed properly.



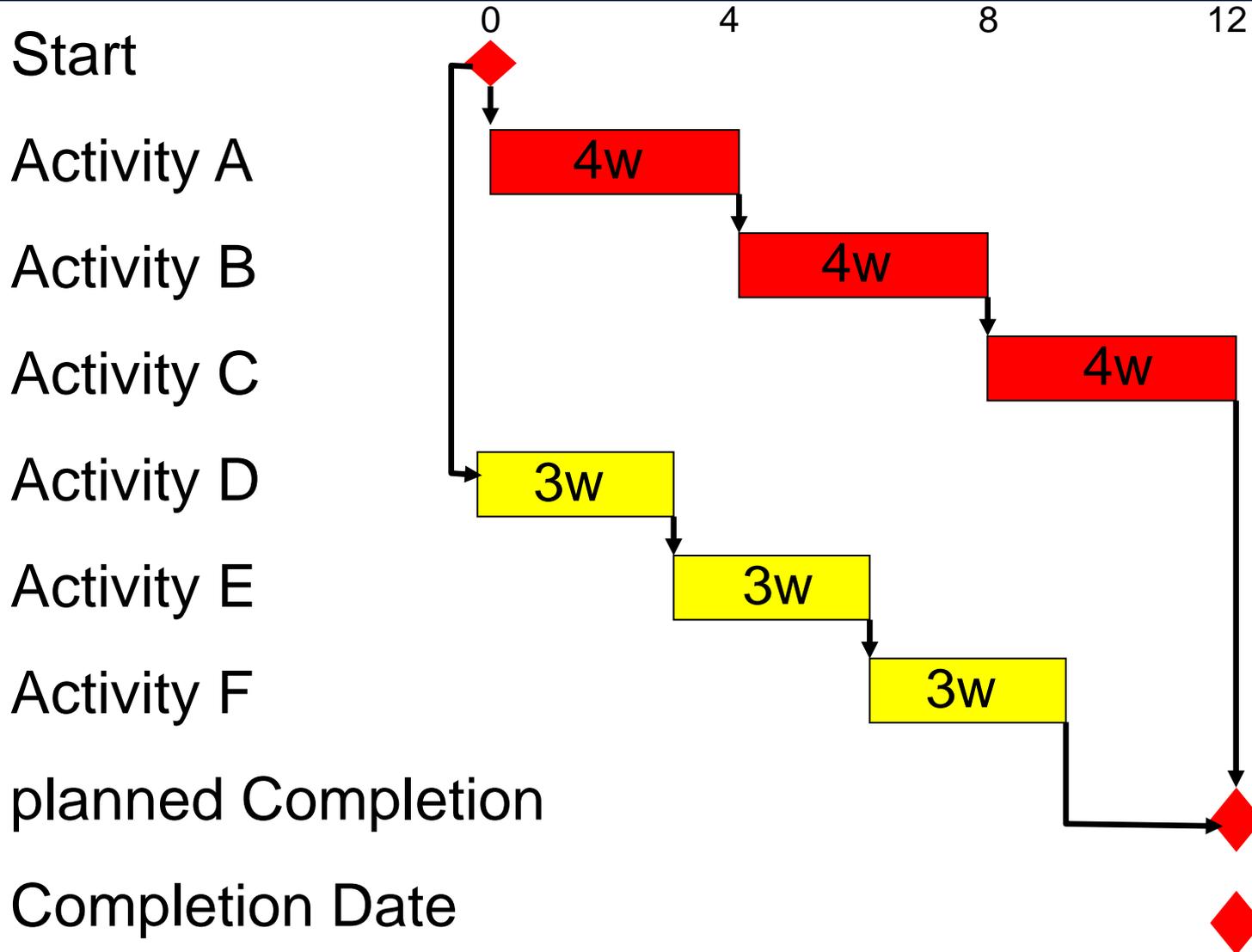


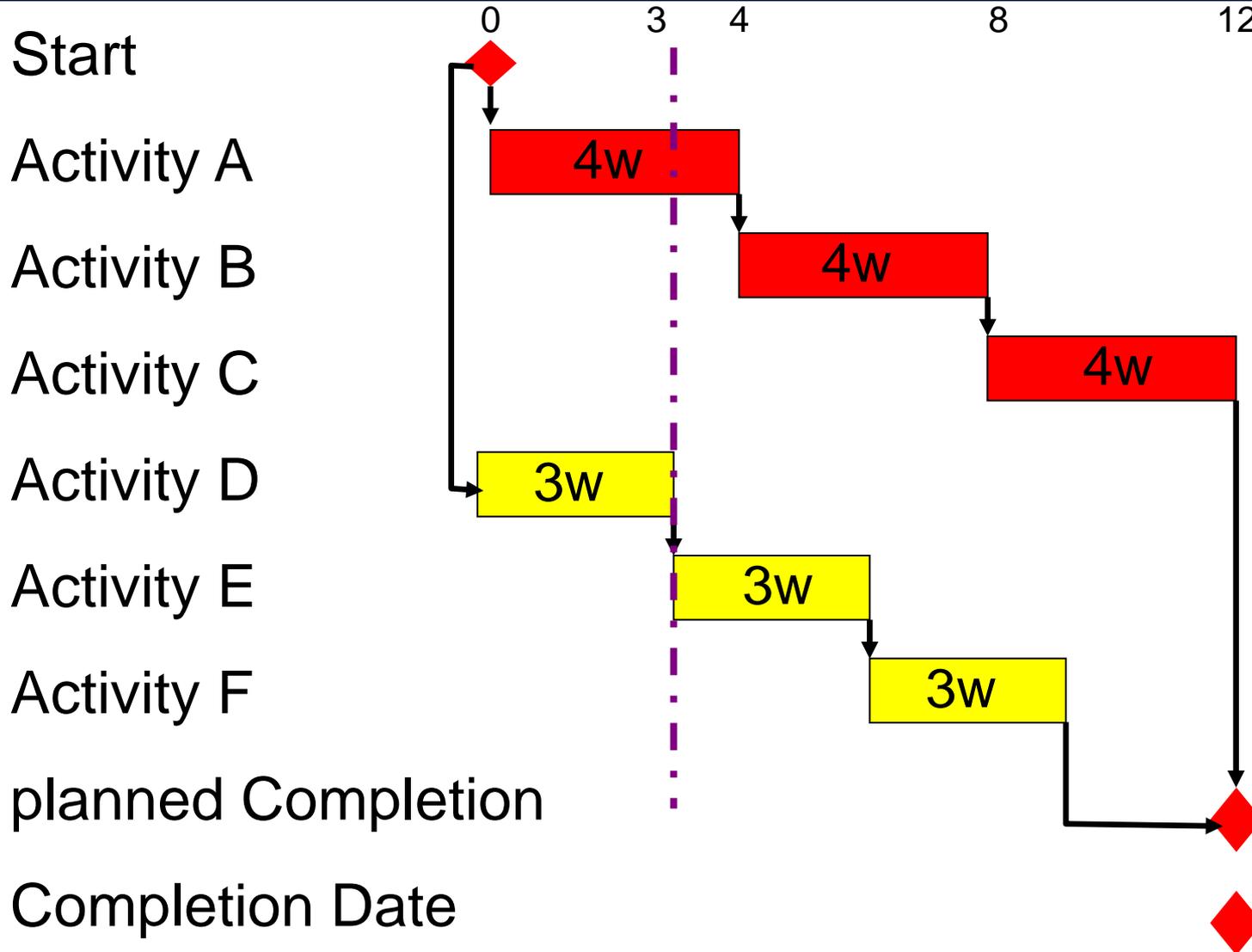


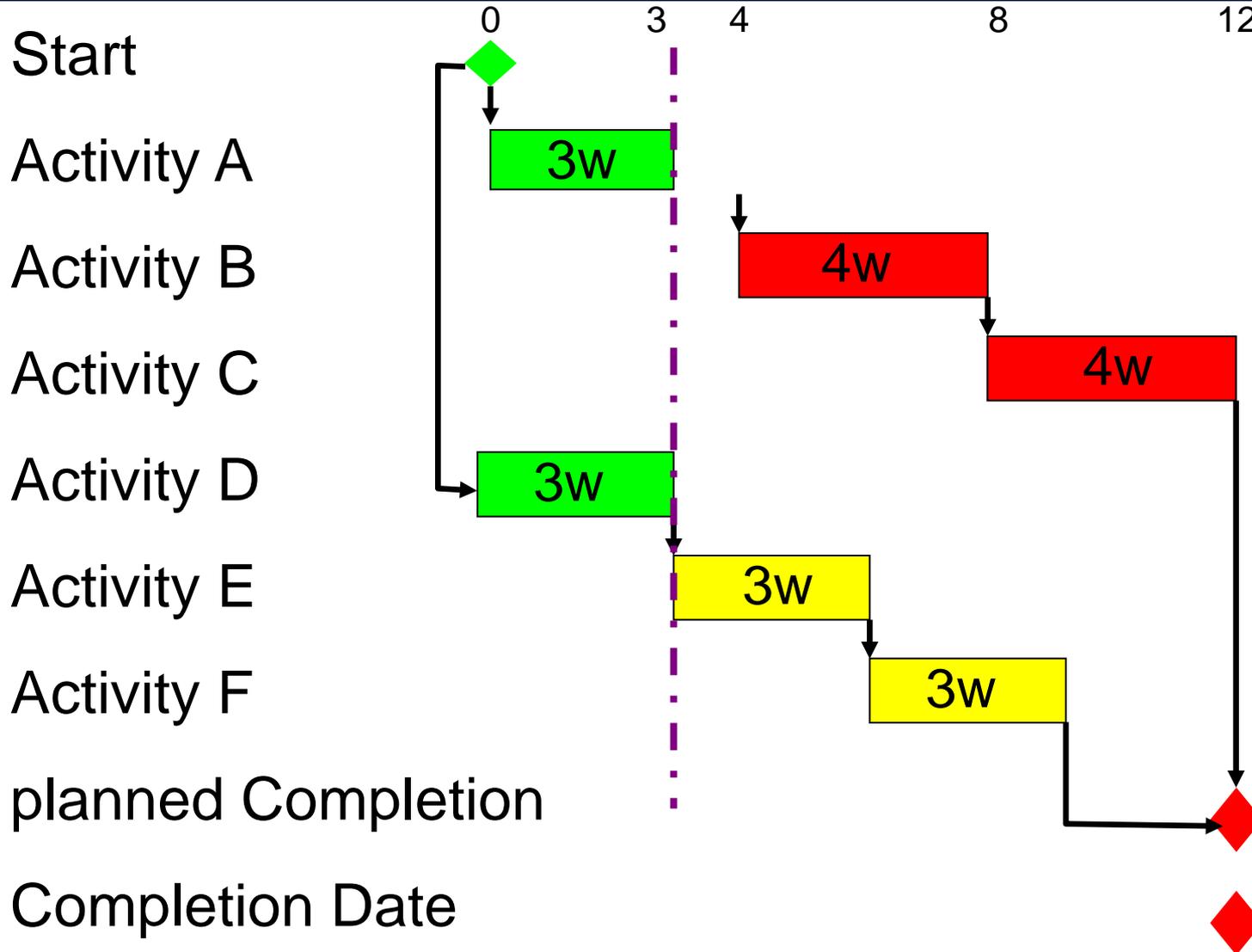


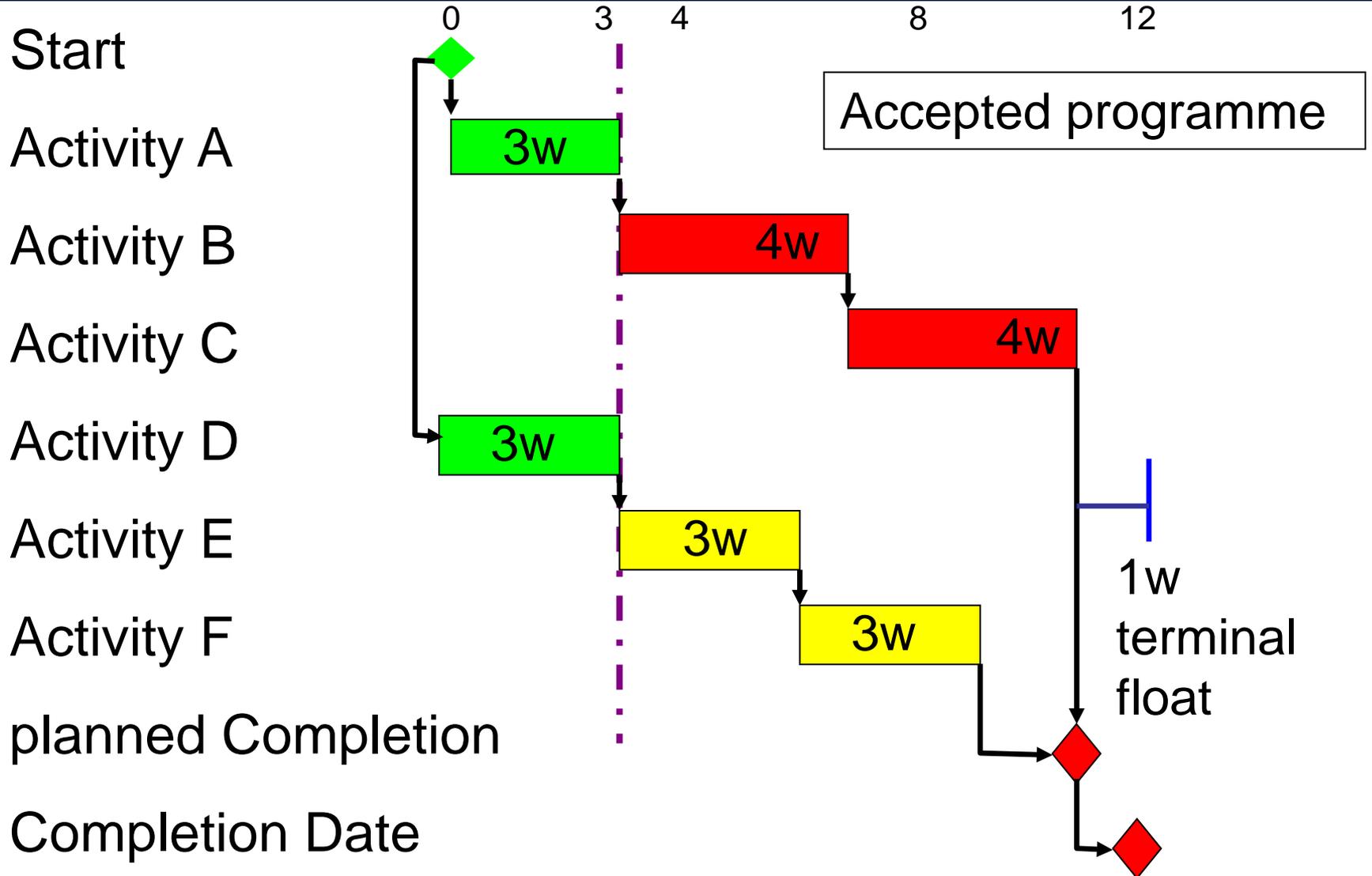
Terminal Float

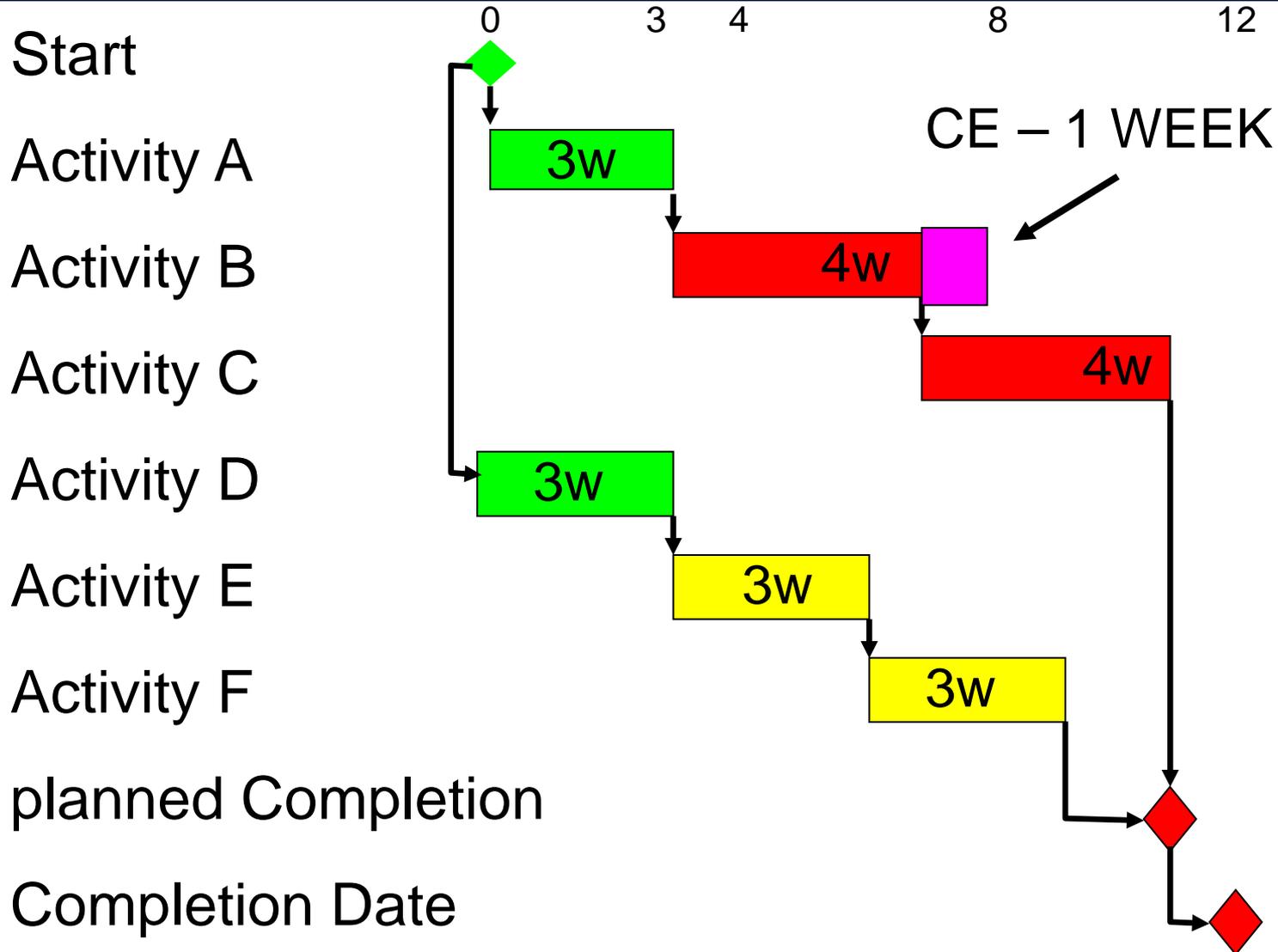
- Difference between planned Completion and Completion Date
- Owned by the Contractor

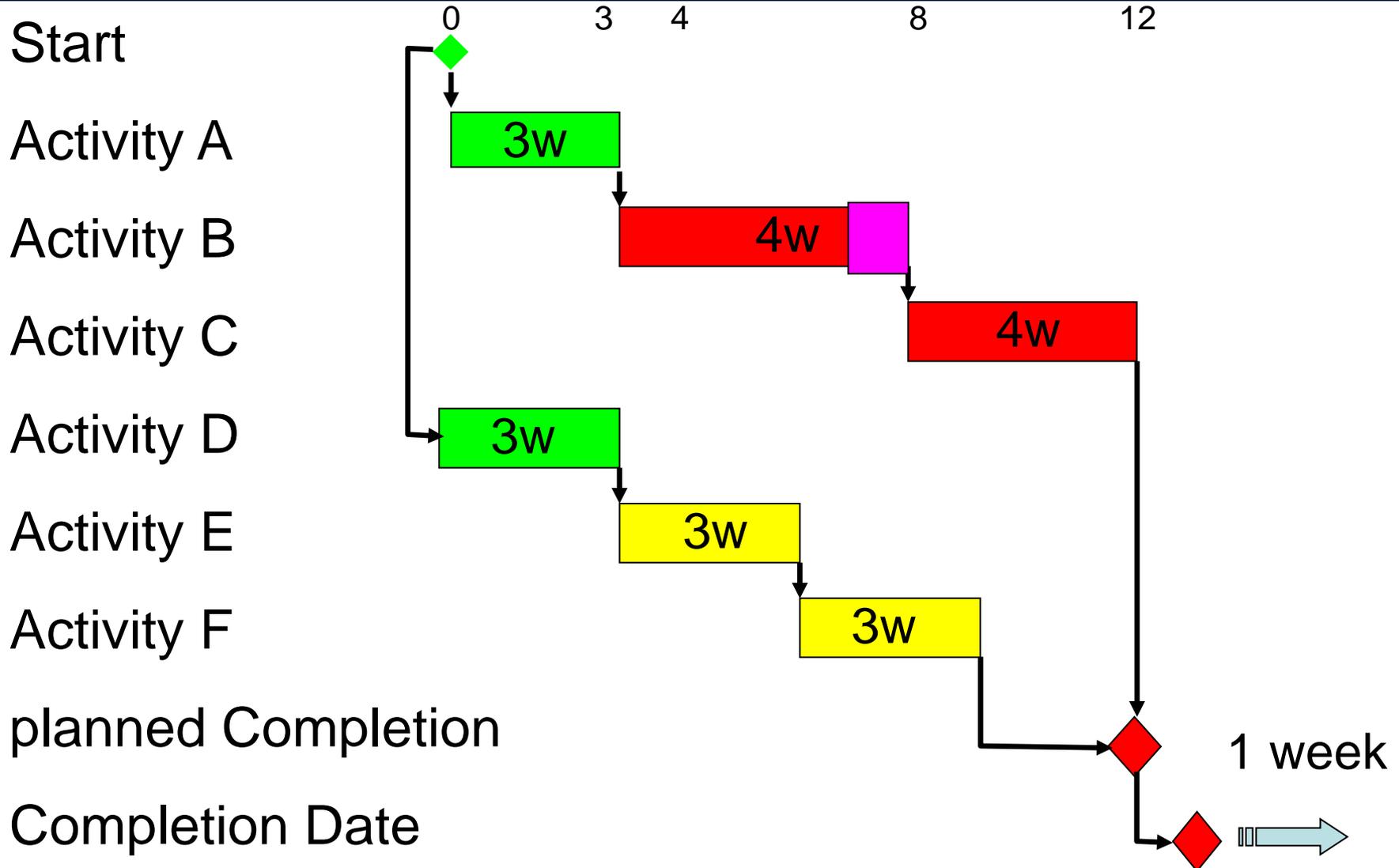












Programming under the ECC

- The ECC has brought programming to the forefront
- Clause 31: detailed programme from outset
- Clause 32: regular updates and acceptance of programmes gives clearer visibility
- No more “claims programme” at the end of the job comparing as built to original contract programme
- Brings a new culture – where both Parties have to work proactively to achieve success on the project
- Time for responses in contract DO NOT work where there is a lot of change
- Insufficient resources to administer contract can be an issue

Practical issues associated with planning generally

- Issue: team members too busy to review programme
- Reality: they have not got time NOT to look at programme
- Issue: planner produces and owns the programme
- Reality: it is the TEAM'S programme and they should own it
“the planner may cook the meal but the team provide ALL the ingredients. They also choose whether to eat the finished article”
- Issue: level of detail given to update programme insufficient
- Reality: educate that need a little more than % complete!

Practical issues associated with planning generally (continued)

- Issue: *Contractor* programme not to clause 31.2
- Reality: *Contractor* at big risk as PM will continue to make own assessments of all CE's
- Issue: *Project Manager* never accepts a programme from the *Contractor* (or at least not in a timely manner).
- Reality: Big problem. Important for both Parties to have Accepted Programme to demonstrate reality and forecast cost/Completion

EARLY WARNINGS

1. Either Party becomes aware of an issue that could affect time/cost/quality
2. Early warning notified
3. Risk Reduction meeting
4. Risks recorded on a Risk Register under clause 11.2(14)
 - a) tender - Risks listed in Contract Data Part 1 and/or 2
 - b) during project - all EW's

NEC3 Risk Register

Compulsory Columns

EWN No.	Date of Issue	Description of the risk	Actions to be taken to avoid/reduce risk	Action/Response By When	Status (open/closed)
001	02/12/2008	Issue of design -lighting system for procurement	Design to be issued by 1st May to avoid delay in procurement		Closed
002	03/12/2008	Insufficient asbestos information	BML - to undertake to necessary surveys to comply with the Asbestos at work information.		Closed
003	02/06/2009	Delay to CER room specification response	Delay in LU response to CGC 108	LUL to provide response by 23rd April for BML review	Open
004	01/06/2009	Problems with EDF and moving of the main inlet cable	Highlighting problems with lack of cooperation from EDF (LU PFI contractor)	Meeting to be arranged to be attended by LUL/BML/EDF for 12th April	Open
005	01/06/2009	Proposed new date of Metronet maintainers	Clarification of role Metronet within project	LUL to provide clarification by 12th April	Open

Risk Reduction Meeting

- The contract requires the *Project Manager* to record the decisions (covering mitigation measures, assumptions etc.) taken at each (and every) risk reduction meeting. This is done through revising the Risk Register which the *Project Manager* has to amend & re-issue to the *Contractor*
- From the *Contractor's* point of view, need to consider what gets integrated into the next programme for acceptance or into a CE programme for a quotation

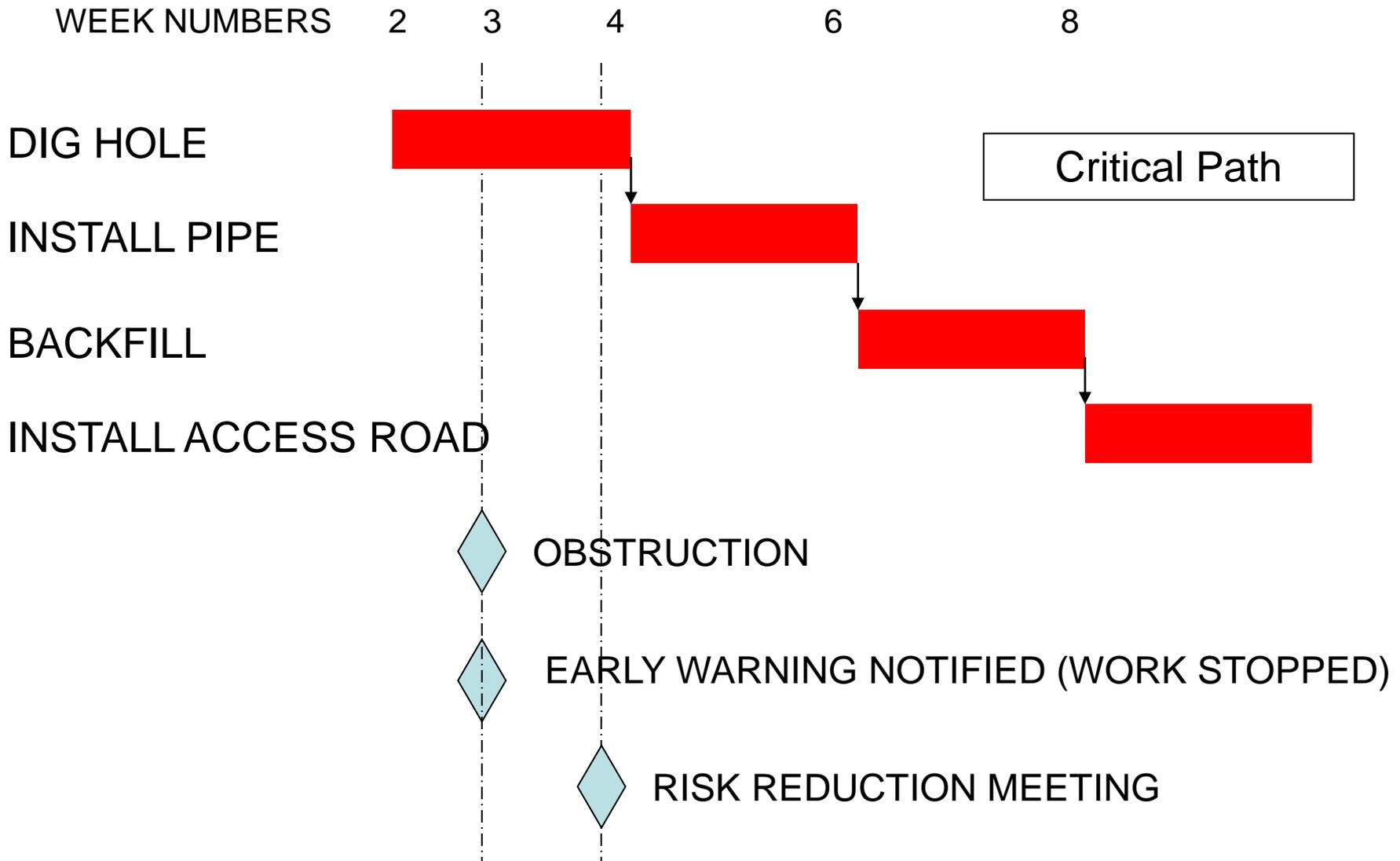
Clause 32.1 (ECC3)

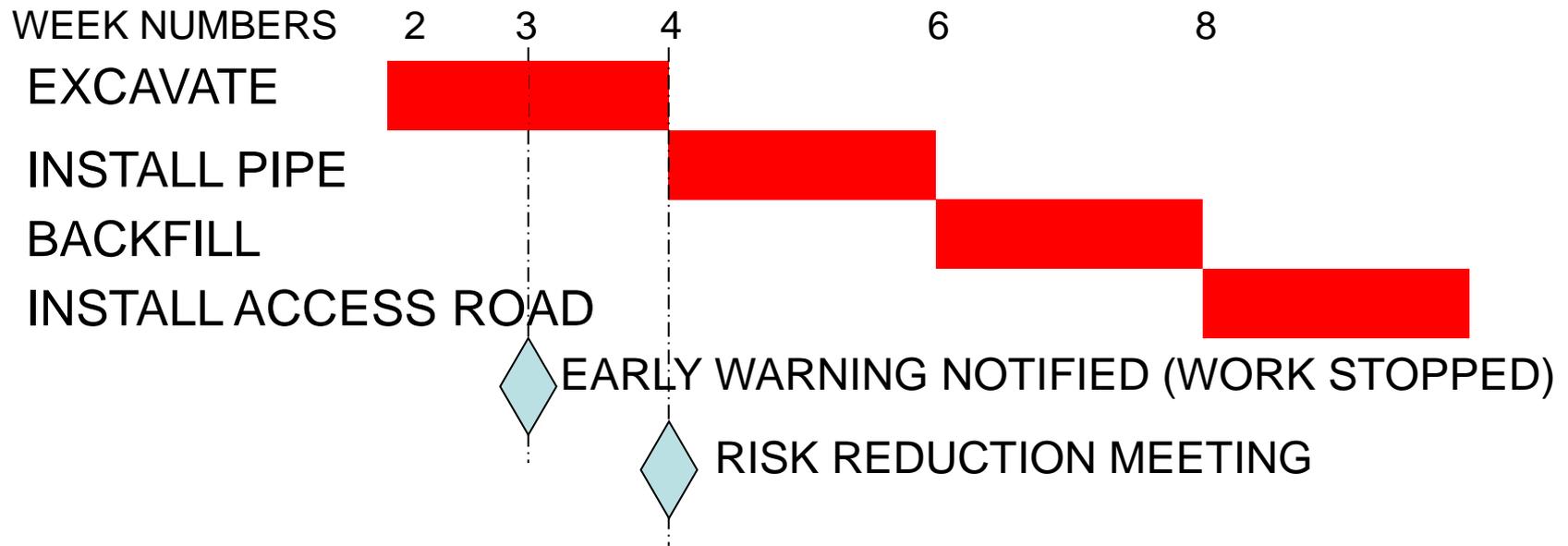
The *Contractor* shows on each revised programme:

- The effects of implemented compensation events ~~and of notified early warning matters~~—

So – what should be put onto a programme in terms of early warnings?

Simple Scenario





Risk reduction meeting

Designer needs to revisit design to consider three options:

- | | <u>Time</u> |
|---|-------------|
| 1. Relocate pipe route to avoid obstruction | •1 week |
| 2. Break out section of concrete obstruction | •2 weeks |
| 3. Break out full extent of concrete obstruction and backfill to pipe level | •1 week |
| | •6 weeks |

Time

Designer needs to revisit design to review three options

•1 week

1. Re-site pipe route to avoid obstruction

•2 weeks

2. Break out section of concrete obstruction

•1 week

3. Break out full extent of concrete obstruction and backfill to pipe level

•6 weeks

We are in Week 4 and due to submit a revised programme

Given the above – what would you show on the revised programme that you are about to submit?

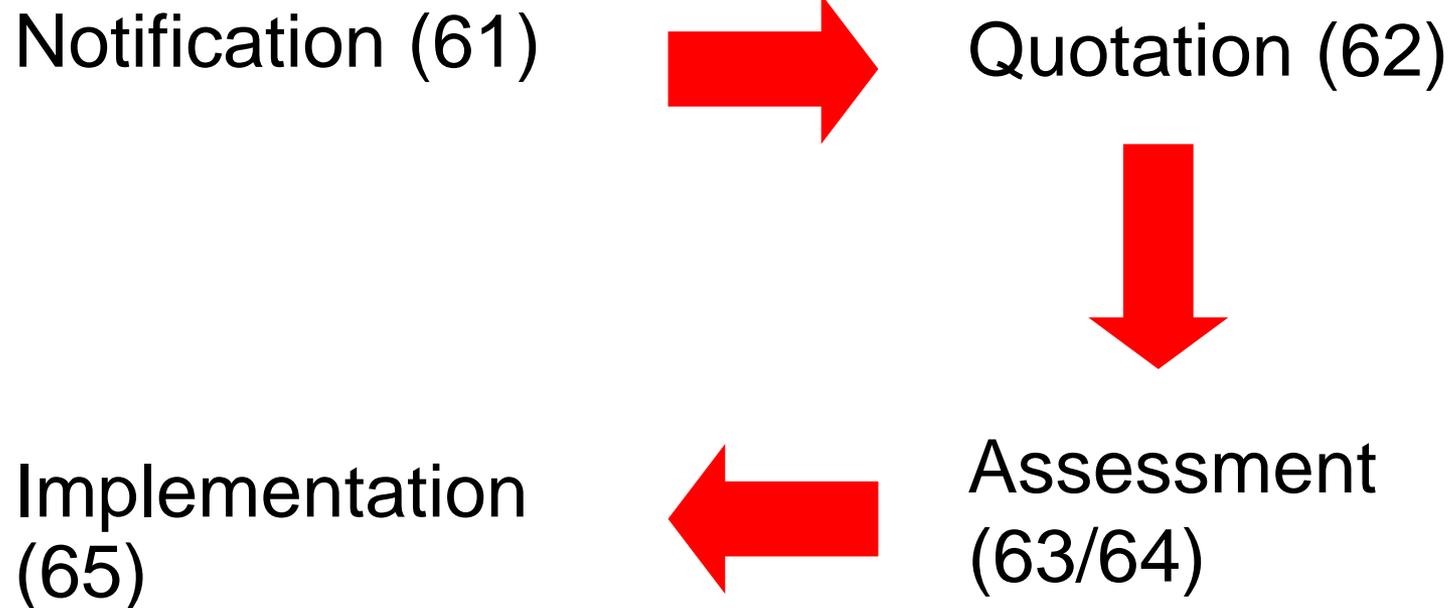
1. Show event as a milestone but no time effect yet

2. Show event as a duration – if so how long 1/2/3/4/6/7/8 weeks

Case Study consider what time effect should be due to EW001...

COMPENSATION EVENTS

There is a defined process to go through with each stage having prescribed timescales



Notification of CE – by PM or C

8 Week time bar - for certain CE's (61.3)

Deemed acceptance after two weeks from Contractor advising no decision received

PM Decision

<1 Week

PM to state if any assumptions to be used(61.6)

Instruct quote(61.1)

Should EW have been given? (63.5)

Can issue proposed instructions(61.2) or alternative quotes (62.1)

C issues quote

<3 Week

Deemed acceptance after two weeks from Contractor advising no decision received

PM Reply

(accept/not accept/assess self)

<2 Week

Deemed acceptance after two weeks from Contractor advising no decision received

PM own assessment (if required)

<3 Week

Implementation

Unless include PM assumptions which have been affected

FINALITY

Time/cost freeze



Clause 32.1

The *Contractor* shows on each revised programme:

- The effects of implemented compensation events

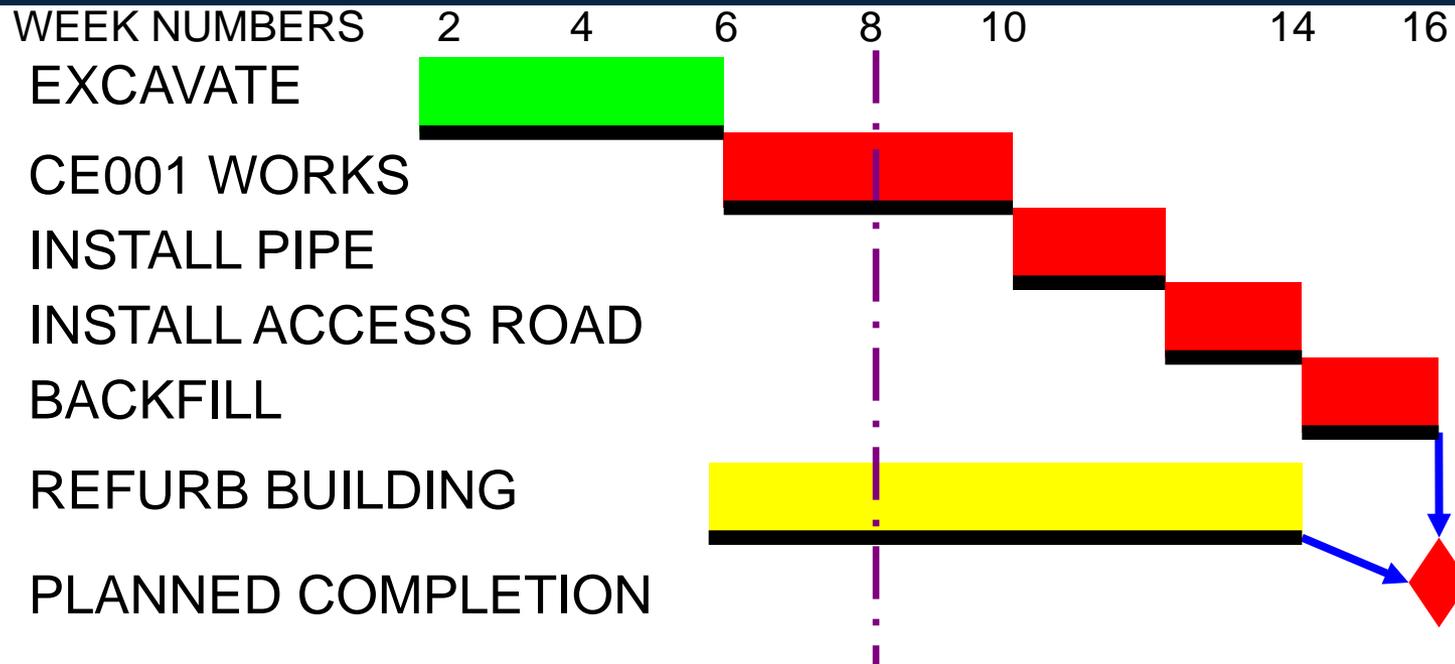
Systematic input of a CE into a programme

- Contract tells us that the effect of a CE should be measured against the planned Completion as shown on the Accepted Programme (63.3)
- (62.2) requests as part of the CE quote alterations to the Accepted Programme
- (32.1) revised programme to show progress achieved on each operation and its effect on remaining activities, the effect of implemented compensation events
- (32.2) submit a revised programme anytime

Systematic input of a CE into a programme

Sequence

- progress programme with works to date
- reschedule programme and check if any effect to Key Dates or planned Completion. If yes – reschedule to mitigate effect
- rebaseline (interim) programme
- input CE and reschedule programme to assess effect
- save and print a filtered programme demonstrating the effect the CE has had
- if there is a second CE to input at the same time then rebaseline once more and repeat the process to assess any FURTHER effect that the second CE has had



- Last agreed programme was week 6 – now week 8
 - CE002 involves 2 weeks additional works to Refurb Building
1. Progress programme
 2. Rebaseline
 3. Input CE, add logic links and rebaseline

Systematic input of a CE into a programme



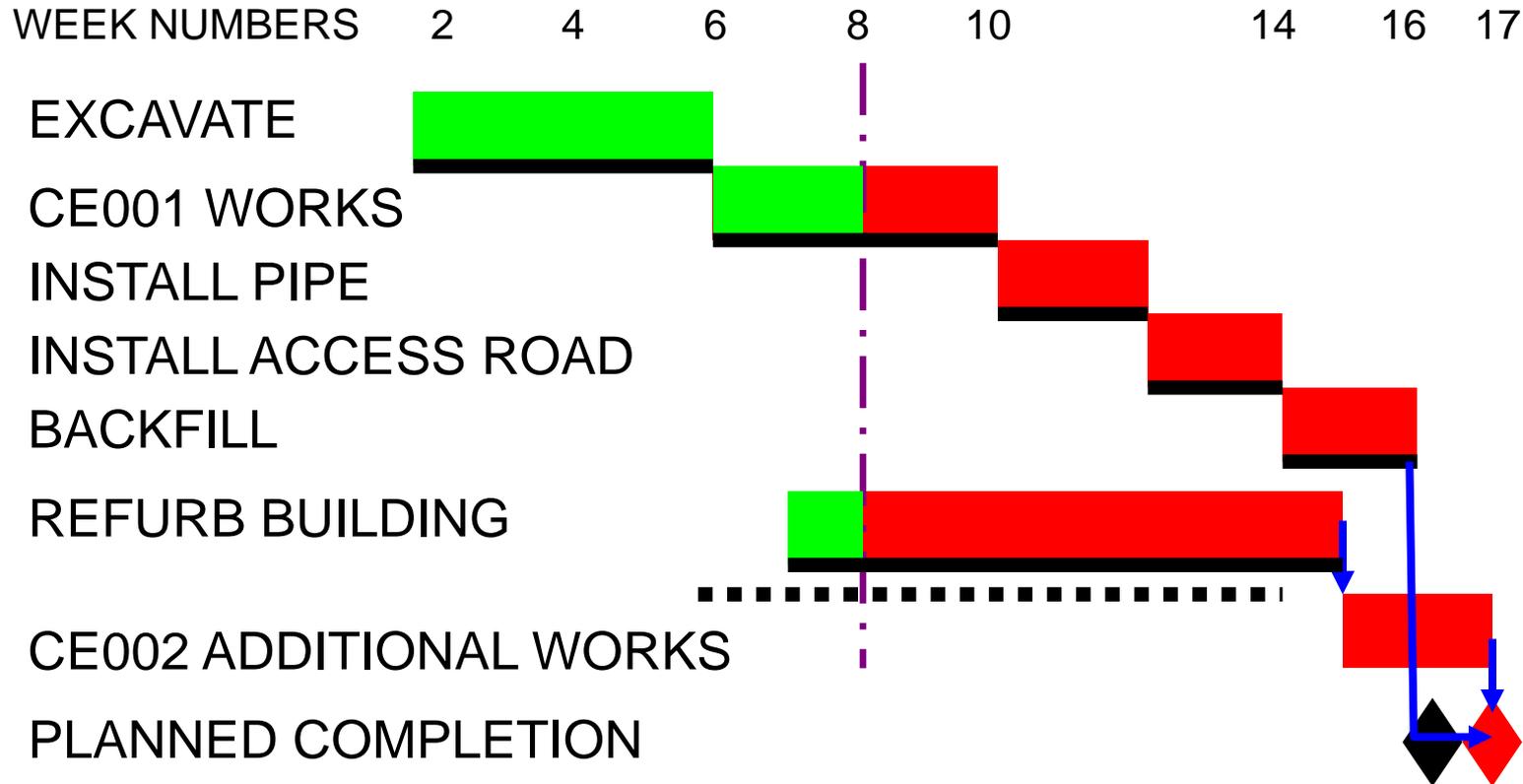
1. Progress programme

Systematic input of a CE into a programme



1. Progress programme
2. Rebaseline (Interim)

Systematic input of a CE into a programme



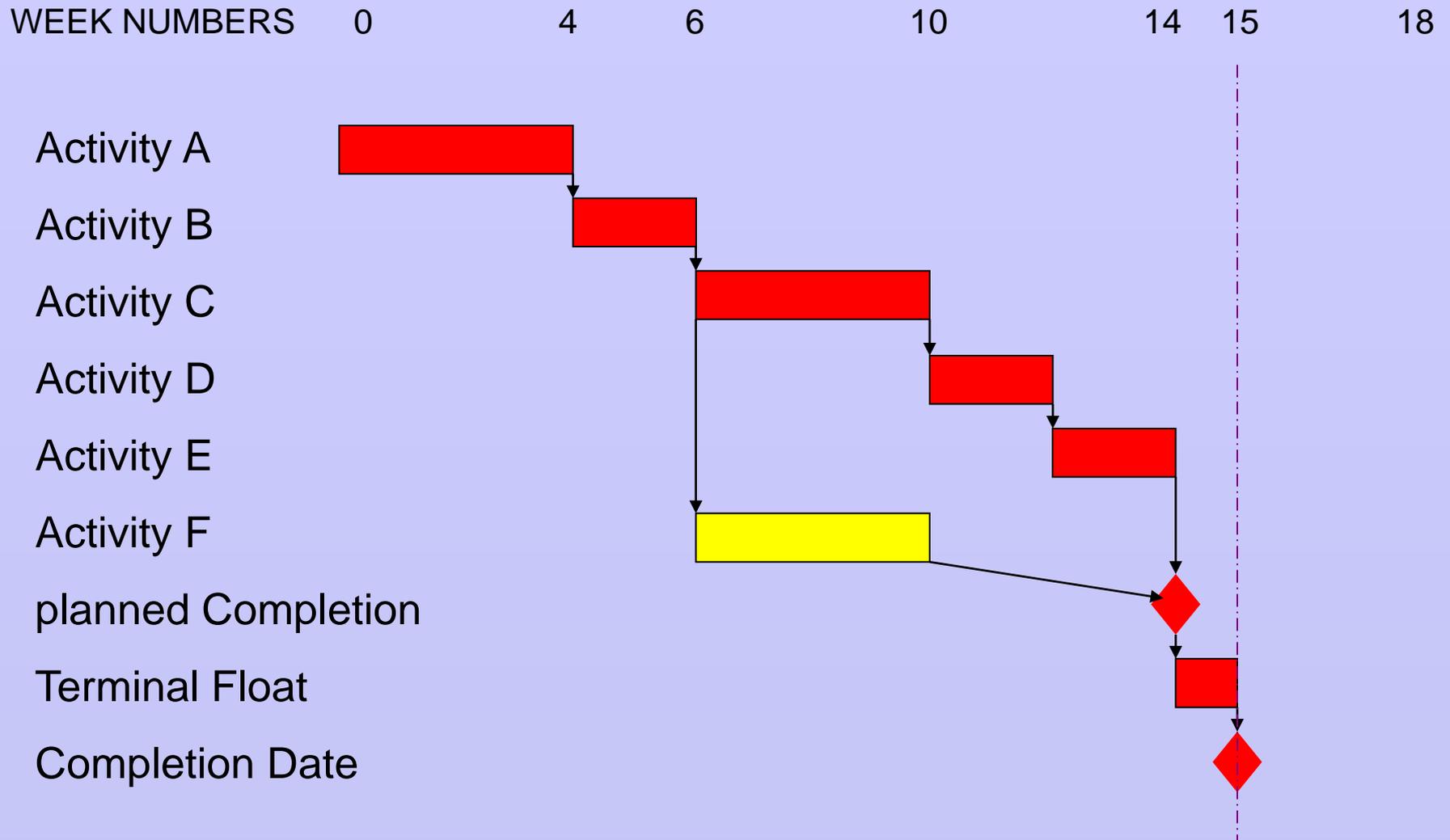
1. Progress programme
2. Rebaseline (interim)
3. Input CE002, add logic links and rebaseline

Systematic input of a CE into a programme



1. Progress programme
2. Rebaseline (interim)
3. Input CE, add logic links
4. Once agreed – Rebaseline (permanent) and note any change to Critical Path

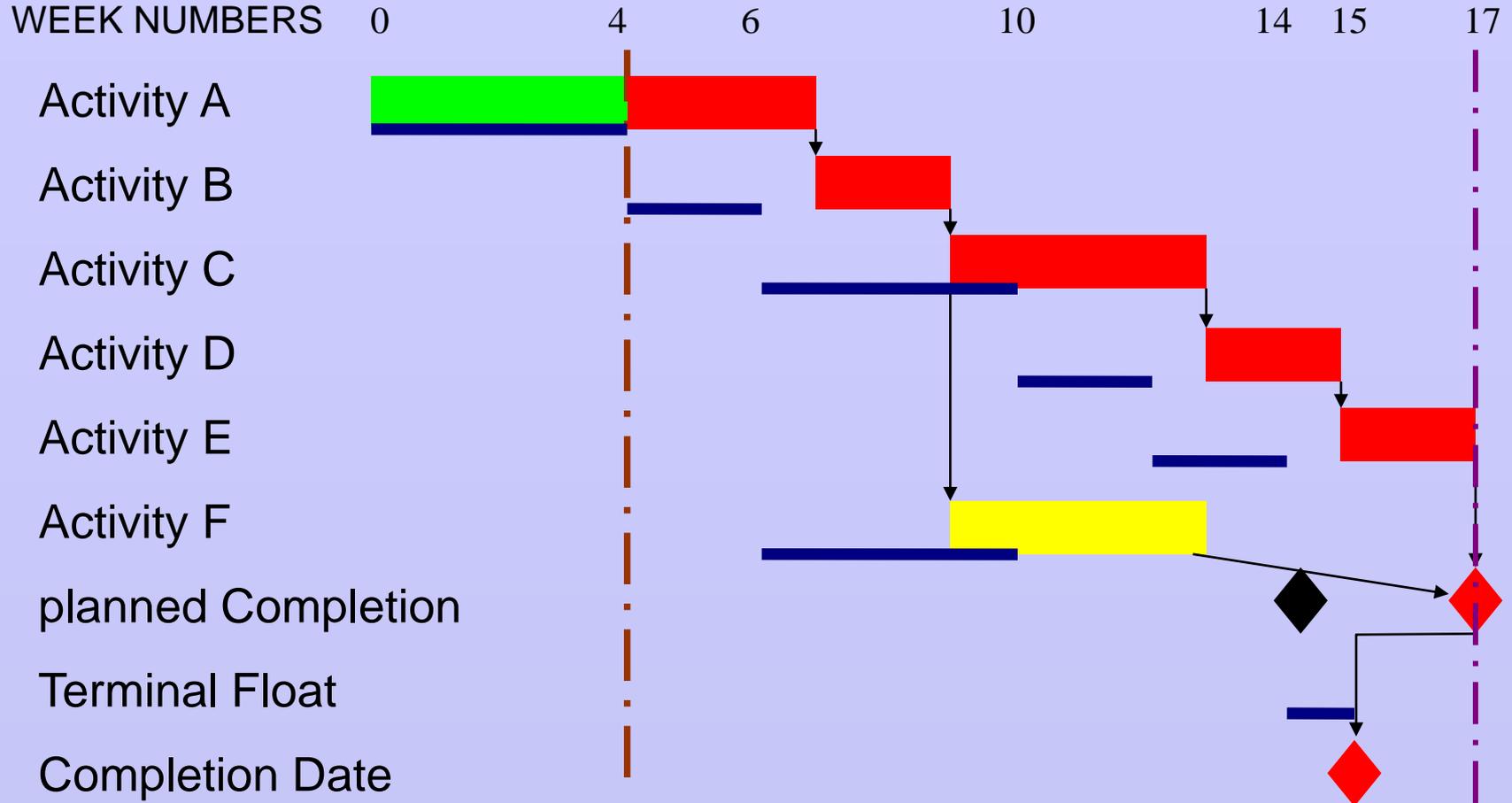
Delay to Completion Date Example



Activities A-E Large Plot 1, Activity F Small plot 2

NB. Delay damages written in to contract of £10000/week

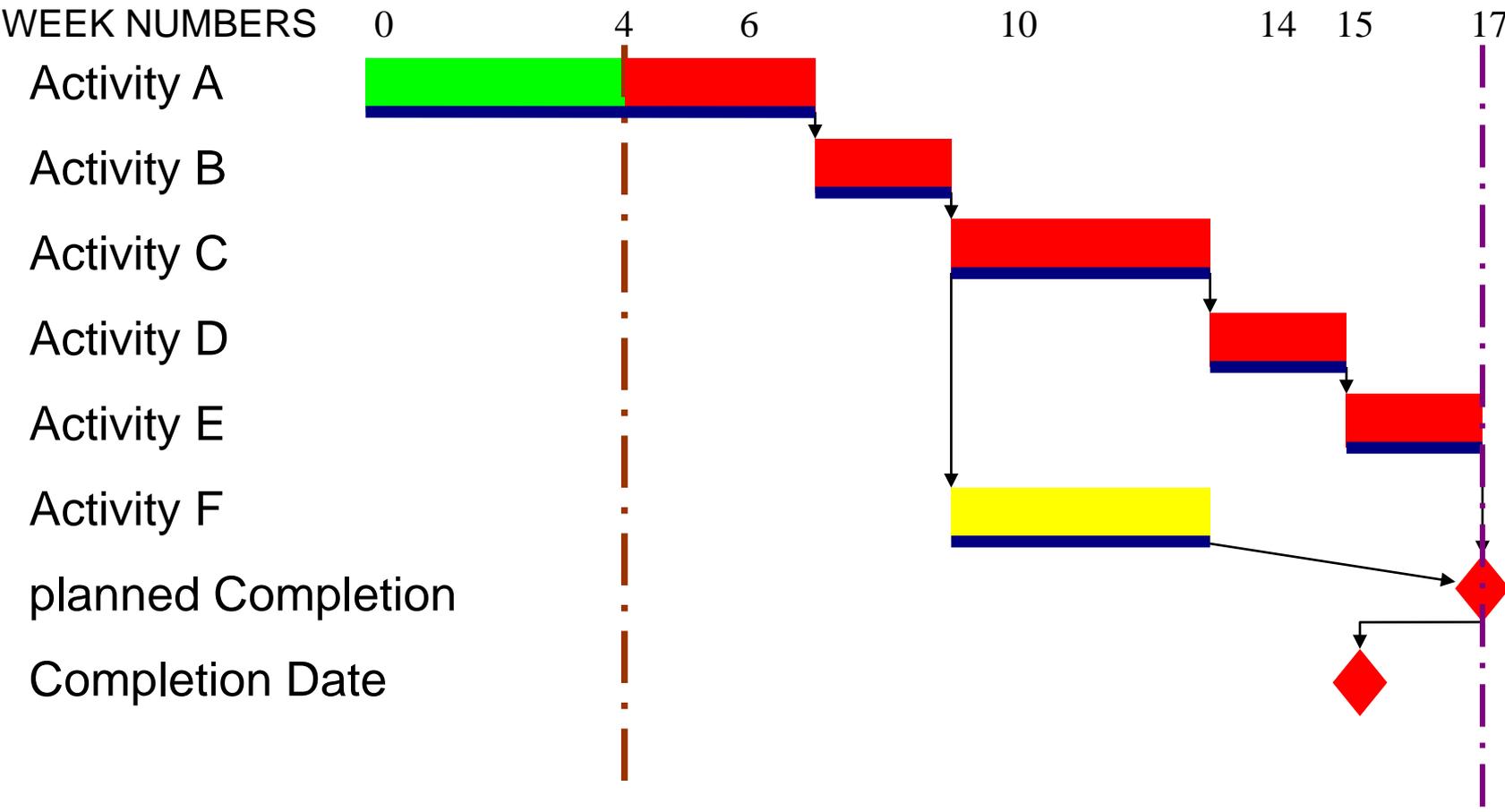
Completion Date Example



Week 4 Submission - A is 3 weeks behind and not able to recover

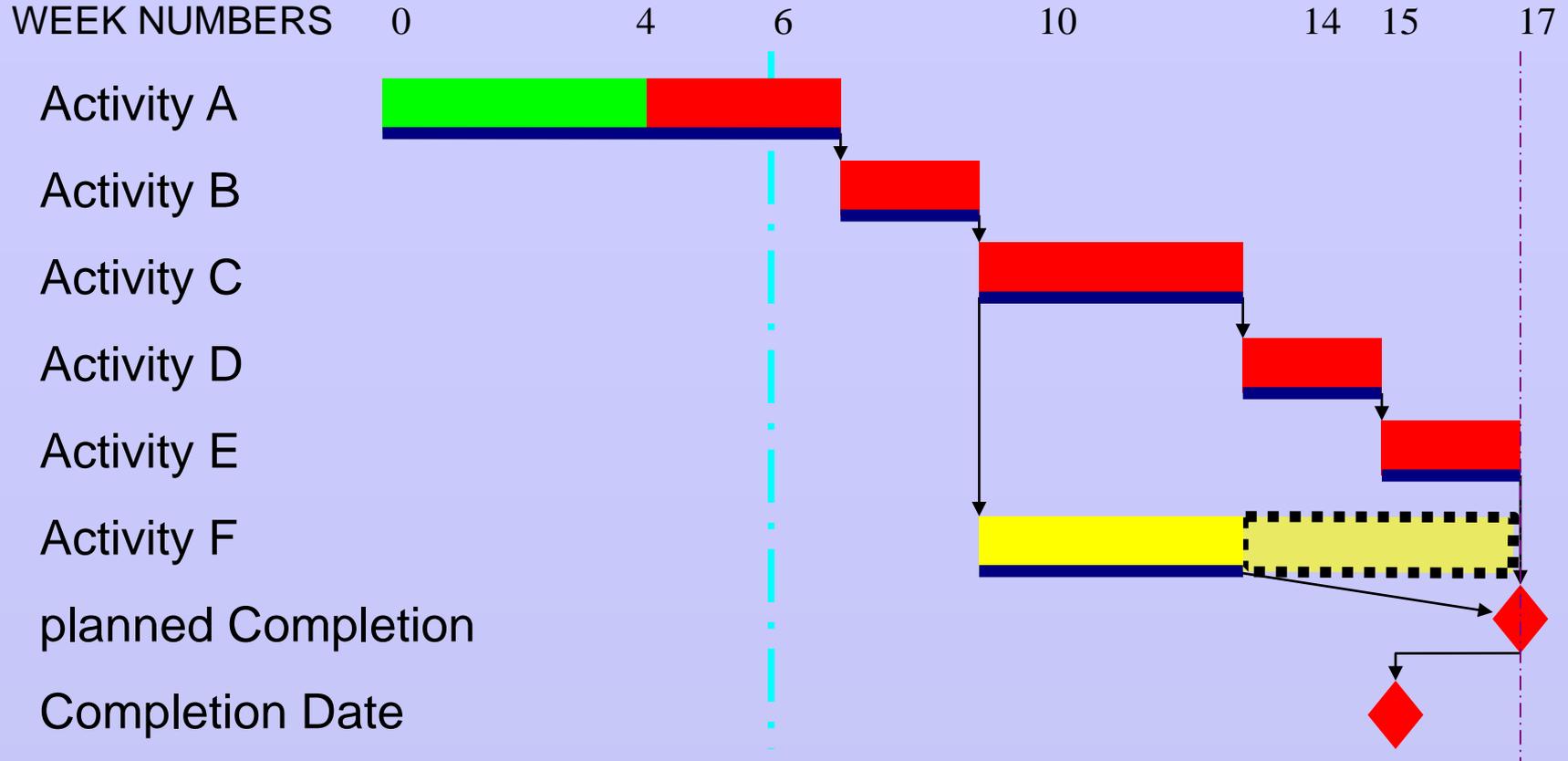
- Viewed that unable to accelerate any future activities
- 1 week terminal float used up hence pC 2 weeks late

Completion Date Example



Following a timely review programme is accepted in writing at week 5 and is re-baselined to become the Accepted Programme

Completion Date Example



- Week 6 – *Project Manager* issues CE001 issued that doubles the scope of Activity F – from 4 weeks to 8 weeks
- What happens to the planned Completion and Completion Date milestones?
- Is the *Contractor* liable for any delay damages (\$100,000/week) ?

Case Study 2

1. planned Completion week 17, Completion Date still week 15 and *Contractor* liable \$200,000 damages
2. planned Completion week 17, Completion Date moves to week 19 and *Contractor* liable \$0 damages
3. planned Completion week 17, Completion Date moves to week 17 and *Contractor* liable for \$0 damages
4. something else...

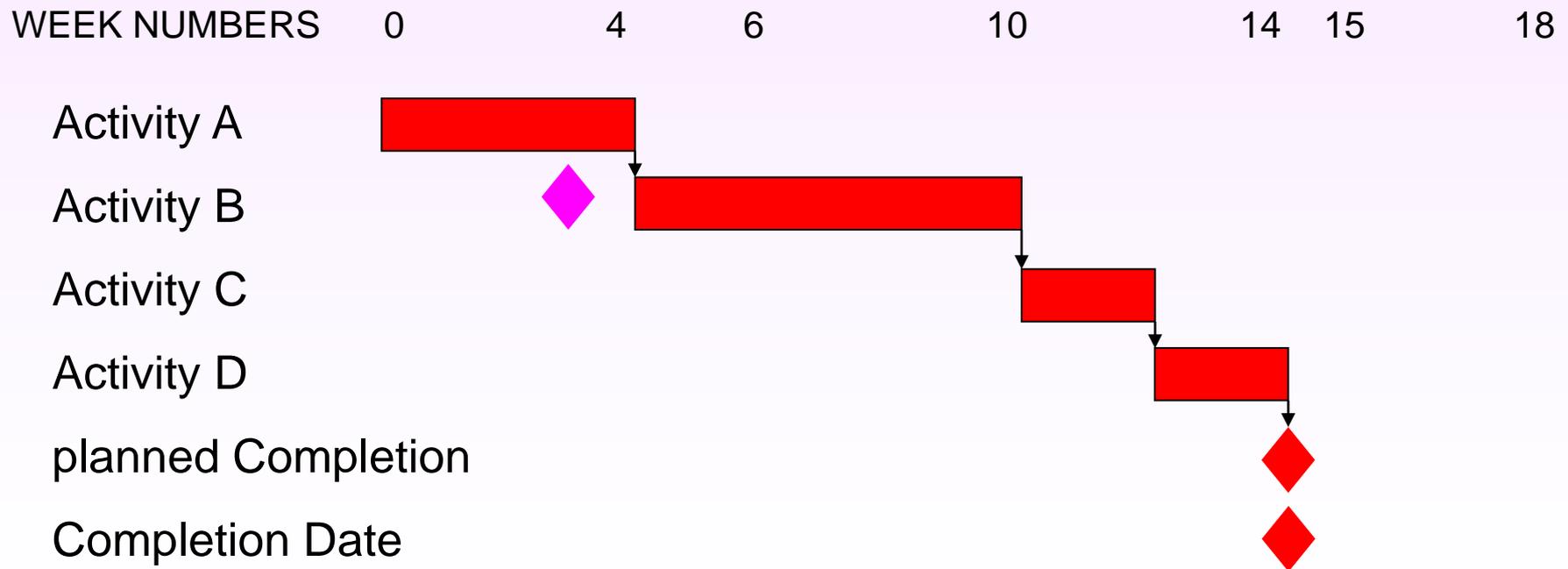
Consider what you believe will happen to the contract programme and hence the level of risk to the *Contractor*.

Clause 63.3

Assessing Compensation Events

- A delay to the Completion Date is assessed as the length of time that, due to the compensation event, planned Completion is later than planned Completion as shown on the Accepted Programme

Importance of Detail in the Programme



- Activity B is electrical works in six separate rooms – each needing two electricians for one week each.
- At the start of week 4 you are informed that there is no access to two of the rooms and they will not be available for five weeks. What will the effect of this CE be?

PROGRAMME SUBMISSIONS AND REPORTING

Programme Acceptance

- Do not wait the prescribed period for a response to sought programme acceptance (typically two weeks)
- If not accepted after two weeks – there is then two weeks worth of progress, two weeks worth of hindsight, two weeks worth of more CE's to muddy the waters

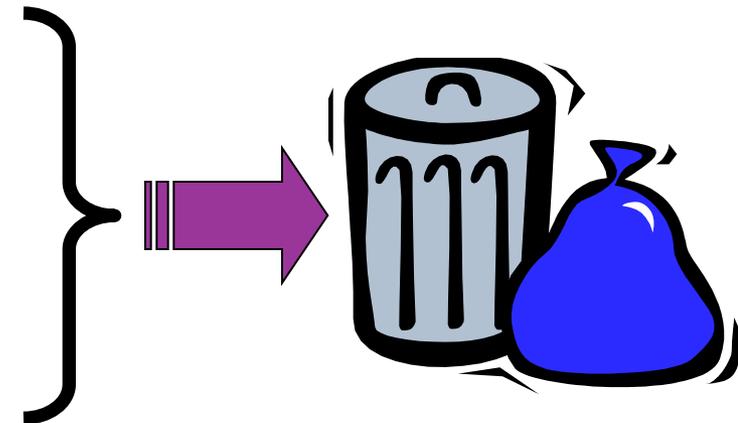
Programme Acceptance

Programme submission

- Week 2
- Week 6
- Week 10
- Week 14
- Week 18
- Week 22

Status

accepted
 accepted
 accepted
 accepted
 accepted
 submitted



How to Smooth Way for Timely Programme Acceptance

- ~~Programme Acceptance = A + ((2.6 - B) x C)~~
- RELATIONSHIP
- communication
- transparency
- level of detail
- “real” time

- Project control is about meeting the objectives of performance metrics
(a method of measuring something, or the results obtained from this)
- Often stated in the Works Information
- Commonly used techniques
 - Activity progress update
 - S curves (Time Audit Analysis)
 - Earned Value Analysis (more sophisticated S curve analysis)
- Earned Value capabilities are often contained in the programming software

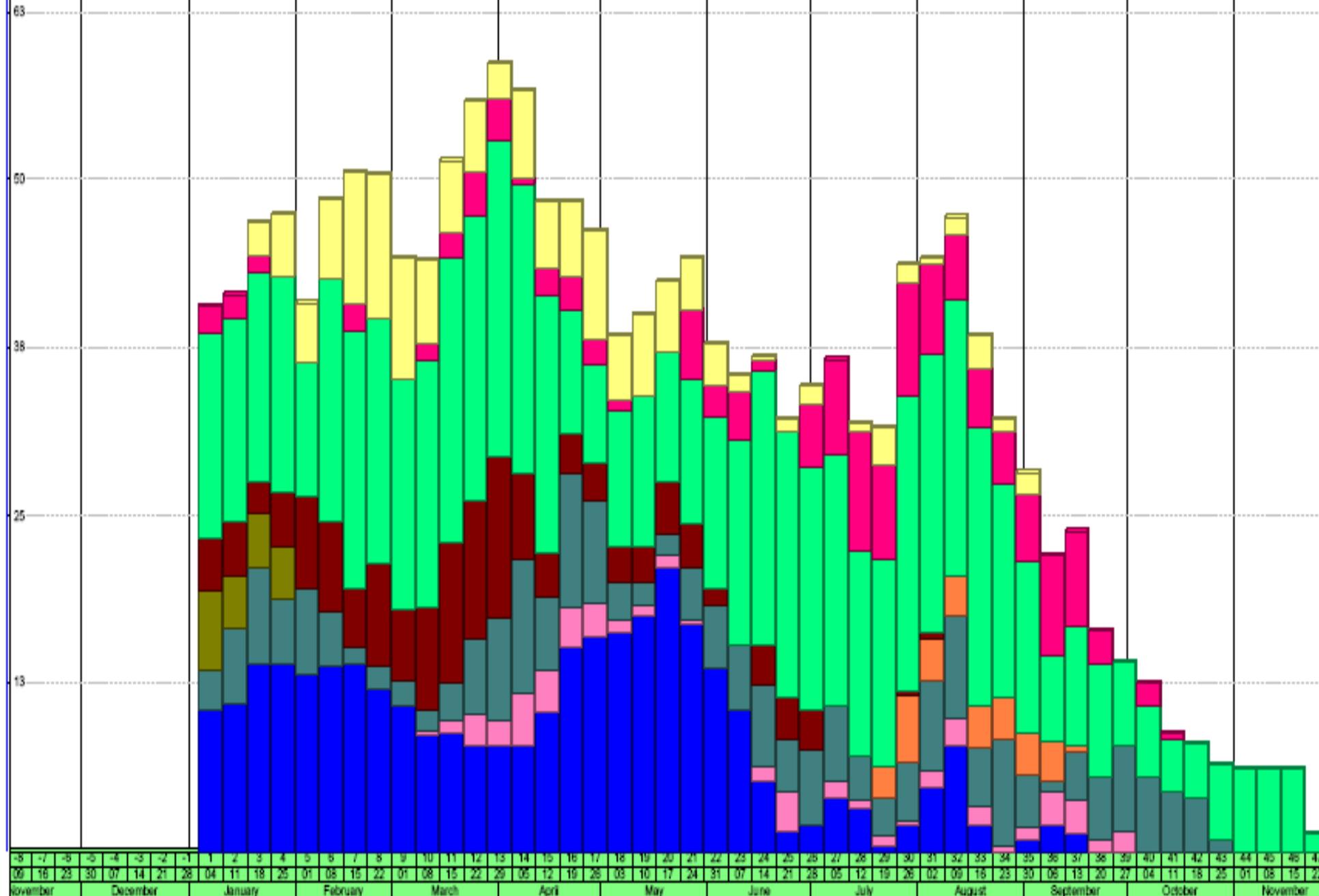
Programme Tracker



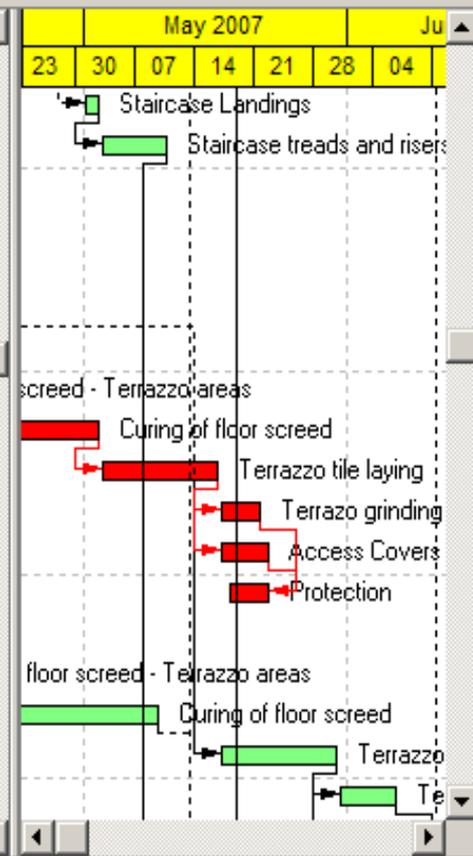
PROGRAMME ASSESSMENTS				Last accepted programme in yellow						
Updated:	28th November 2007									
CRITICAL PROGRAMME ASSESSMENT TRACKER										
Prog.	Description	CC No.	Date	Direct Delay	Cumulative Delay	Primary CMS completion	planned Completion Date	Contract Completion	Programme accepted by Metrollet	Comments / CC Notes
Tender	Issued and included within signed contract		11-Jan-07			24-Oct-07	13-Dec-07	13-Dec-07	Accepted in signed contract	46.6 week overall duration
Rev 01	Late award of contract pushed out whole programmed works.		30-Apr-07			19-Dec-07	07-Feb-07	27-Feb-08	Not accepted	Some mitigation to bring planned Completion in advance of Contract Completion
Rev 03	Acceleration incorporated to meet Metronet requirements of primary CMS by 1st August and secondary by 4th September.		25-May-07	0	0	01/08/2007 (apart from 3/207)	13-Nov-07	27-Feb-08	Accepted by email 12-Jun-07	Planned Completion brought forward by accelerating works within closures and at other times. New planned Completion milestone to be one measured for any future EOT.
Rev 04	Planned completion milestone is still the same but Primary CMS milestone is moving out.		19-Jun-07	0	0	08-Aug-07	13-Nov-07	27-Feb-08	Rejected	Mess Room 3/281 can not be completed until after BIU
Rev 04a	3/571 works brought forwards and 3/281 works delayed until after BIU		22-Jun-07	17	17	08-Aug-07	6-Dec-07	27-Feb-08	Accepted in writing.	Mess Room 3/281 resequenced to follow after BIU
Rev05(draft)	Late design pushing out CMS milestone		20-Jul-07	0	0	3rd Oct-07	6-Dec-07	27-Feb-08		
Rev 06	Late design pushing out CMS milestone		2-Aug-07	0	0	17th Oct-07	6-Dec-07	27-Feb-08	Verbally thought to be ok by Ed Tickner	Supposed to be accepted by Ed Tickner prior to his holiday on 3rd August
Rev 07	Late design pushing out CMS milestone - specifically passageways 3/205+6+7		14-Sep-07	33	50	12th Dec-07	29-Jan-08	27-Feb-08	Accepted in writing.	Await confirmation of EOT in writing from Metronet - letter issued 19th October
Rev 08	Metronet revised BIU date pushes out works to 3/281 new Mess Room		22-Oct-07	15	65	12th Dec-07	18-Feb-08	19-Mar-08	Acceptance of EOT in line with Rev 08 programme 12th November	EOT of 65 days issued by ET in writing by email on 12th November
Rev 09	Still issues affecting upper/lower passageway CMS		13-Nov-07	0	65	8th Jan 08	18-Feb-08	19-Mar-08	No feedback to date	

“One Programme” Philosophy

- procurement
- method statement schedule
- design
- resources
- short term look ahead
- one programme to meet full project teams needs

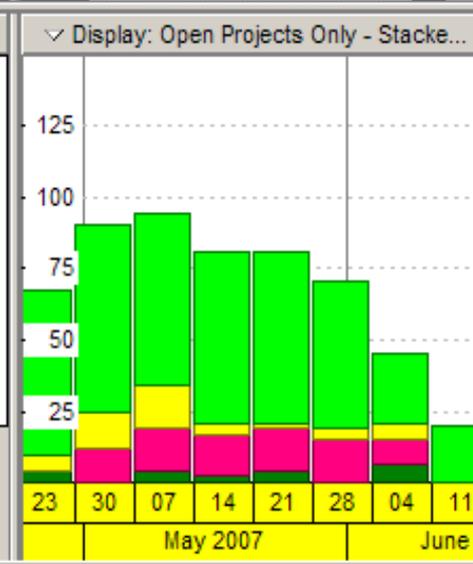


Activity ID	Activity Name	Budgeted Total Cost	Original Duration	Start	Finish	Total Float	TRA
SPT10	Staircase Landings	£9,933.90	2	01-May-07*	02-May-07	38	0
SPT20	Staircase treads and risers	£17,671.67	6	03-May-07	10-May-07	38	1
P15/21/22/23/24/27/28/29/34/68		£26,230.83	26	27-Nov-06	05-Jan-07	22	
STP1380	Lay floor screed - Granolithic areas	£8,264.48	5	27-Nov-06*	01-Dec-06	8	0.5
STP1470	Lay grano topping	£17,966.35	6	03-Dec-06	08-Dec-06	8	1
STP1400	Curing of floor screed	£0.00	28	09-Dec-06	05-Jan-07*	26	0
N5-N10 within combisafe fence		£65,862.98	36	03-Apr-07	22-May-07	0	
STP1820	Lay floor screed - Terrazzo areas	£8,038.40	5	03-Apr-07*	09-Apr-07	0	1
STP1410	Curing of floor screed	£0.00	28	05-Apr-07	02-May-07	0	0
SPT400	Terrazzo tile laying	£35,766.59	10	03-May-07	16-May-07	0	1.5
SPT420	Terrazo grinding	£9,008.51	3	17-May-07	21-May-07	0	0
SPT410	Access Covers	£3,537.88	4	17-May-07	22-May-07	0	1
SPT430	Protection	£9,511.60	3	18-May-07	22-May-07*	0	0.5
N10-N15 within combisafe fence		£14,088.80	43	10-Apr-07	07-Jun-07	37	
STP1910	Lay floor screed - Terrazzo areas	£8,038.40	5	10-Apr-07*	16-Apr-07	42	1
STP1430	Curing of floor screed	£0.00	28	12-Apr-07	09-May-07	58	0
SPT440	Terrazzo tile laying	£3,859.33	10	17-May-07	30-May-07	37	1.5
SPT460	Terrazo grinding	£649.95	5	31-May-07	06-Jun-07	37	1
SPT450	Access Covers	£1,035.52	2	31-May-07	01-Jun-07	41	0



Display: Resource

- Screeder - Terrazzo
- Floor Protection
- Stair Nosing
- Grinder
- Tiler
- Screeder - Granolithic



Display Activities for selected...

Time Period Resource

Programme Submission

- Day 1 – formal issue of programme and associated reports to Project Manager
- Day 2 - programme review meeting with *Project Manager* – focused on critical activities and programme narrative
- Day 4/5 – acceptance in writing of programme
- Day 5 – rebaseline programme and use that programme to progress and monitor against

- Remember the contract represents the MINIMUM that you should show on your contract programme. Can show more
- RELATIONSHIP – as long as you both agree anything is possible...
- TRANSPARENCY – do what ever it takes to present and produce information that makes things clear and unambiguous
- Work in real time – each programme is a “line in the sand” as to what has happened and what is projected at a single point in time
- Work together to ensure programme accepted timely
- Keep on top of EW + CE’s and associated time affects – close out items on Risk Register ASAP. Early resolution of ANY issues and don’t wait for prescribed periods for response!
- Consider a Project Start Up Workshop to get the core ECC processes working for your project from the outset