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NEC Forum 3 - 2025

NEC training sponsored by  **ECS**

FREE

**Thursday 10th April
4 pm - 6 pm
ECC4 Core Clauses**

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**Improving SA
Infrastructure
using NEC Contracts
as intended**

10 NEC Jam Sessions Topics for 2025

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13 th February	The NEC4 Family of Contracts - Introduction
13 th March	Procurement and Contract Strategies
10 th April	ECC4 - Core Clauses
8 th May	PSC4 - Introduction
12 th June Presented by Dr Jon Broome	Contract Strategy: Choosing the Main Options under the NEC4 Engineering & Construction Contract (with reference to other members of family + filling in Contract Data entries) and how to incorporate Early Contractor Involvement (ECI)
10 th July	ECC4 - Early Warnings and Compensation Events
14 th August	ECC4 – Dispute Avoidance
11 th September	Contract Strategy: The use of Option X29 : Climate Change
9 th October Presented by Dr Jon Broome	Contract Strategy: The Secondary Option 'X' clauses including preparation of the associated Contract Data.
13 th November	ECC4 – Tendering and Contract Finalisation

Objectives of 10 NEC Jam Sessions

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- Delegates should leave with
 - an understanding of the NEC philosophy, its associated culture change and how it contributes to the effective management of a project;
 - a basic understanding of how to prepare, tender to, and administer the ECC4 (Engineering and Construction Contract)
 - basic knowledge of the PSC4 (Professional Service Contract)

ECS Associates: Facts & Values



More than 3 decades of Project and Contract Management experience in South Africa and beyond



Drive clients' success through collaborative, mutually beneficial contract and business management practices



Collaborative Project Strategies©
Agile Project Delivery



Network based business model

Level 1 35% BWO BBEE company.

Integrity

Professionalism

Collaboration

Courage

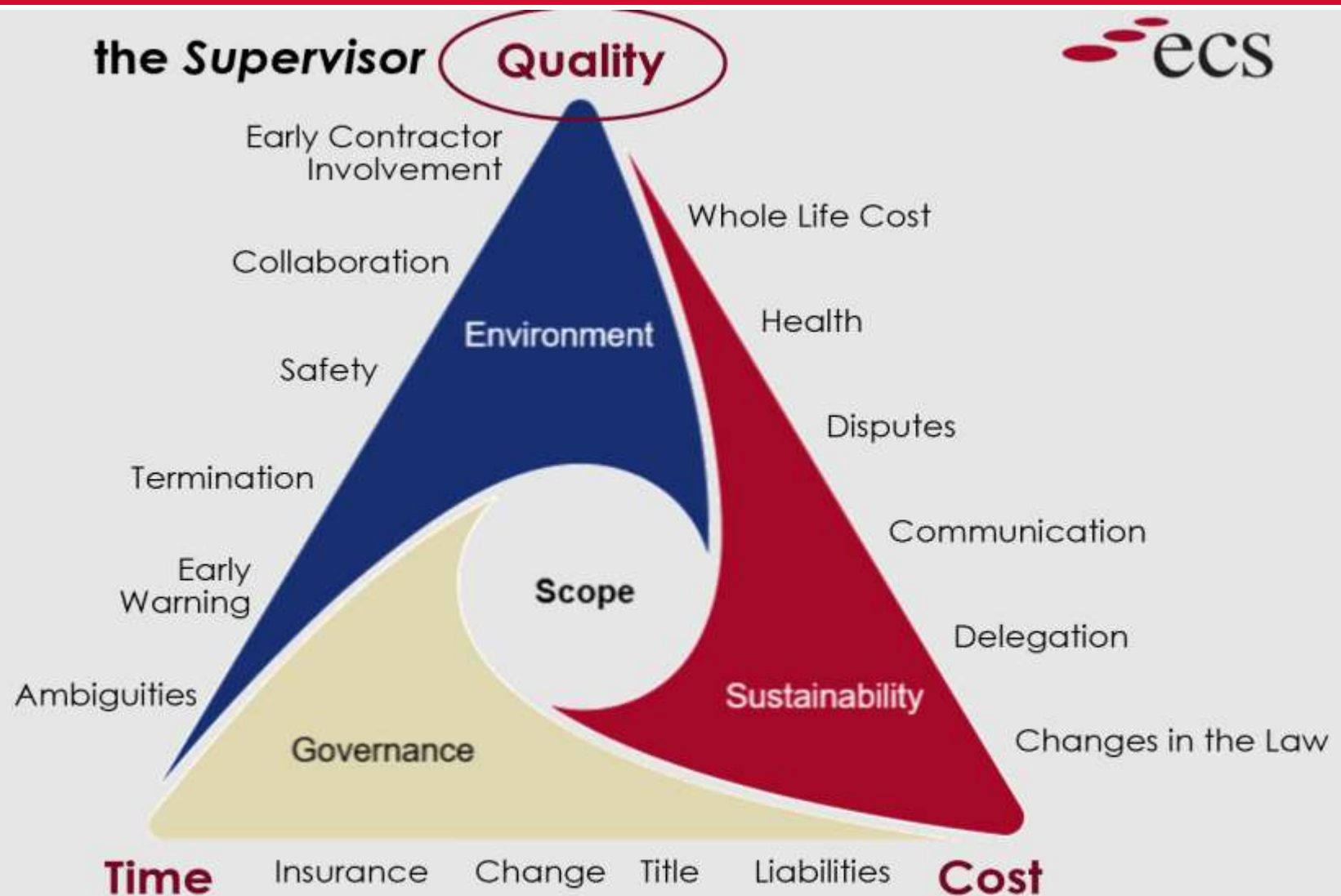
ECC4 Core Clauses

Structure of a Contract

- Core Clauses always apply (1-9)
- Choose one main Option (A-F)
- Select Dispute Resolution Option W1 or W3
Dispute Avoidance Board
- Choose required secondary Options
- Contract Data selects *conditions of contract*
 - Contract Data part one by the *Client*
 - Contract Data part two by the *Contractor*

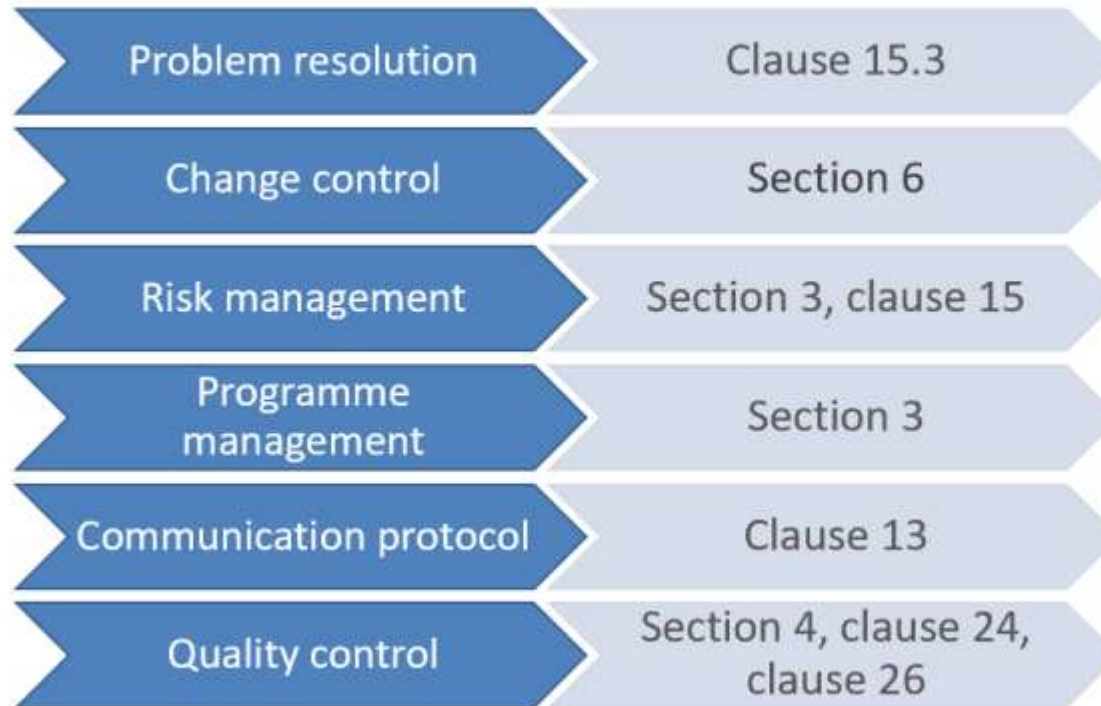
The Project Manager and the Supervisor

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Project management and NEC

Project management principles in the ECC



Following the contract ensures that these principles are implemented

Core clauses always apply

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1. General
2. The Contractor's main responsibilities
3. Time
4. Quality management
5. Payment
6. Compensation events
7. Title
8. Liabilities and insurance
9. Termination

Section 1 General

Actions and Definitions

10.1 The Parties, *Project Manager & Supervisor* shall act as stated in this contract

10.2 (and) in a spirit of mutual trust and co-operation

11. Definitions - also in main option clauses
Italicised terms are identified in Contract Data

Clause 11.2 Definitions

- 11.2(1) The Accepted Programme
- 11.2(2) Completion
- 11.2(3) The Completion Date
- 11.2(4) The Contract Date
- 11.2(5) A Corrupt Act
- 11.2(6) A Defects
- 11.2(7) The Defects Certificate
- 11.2(8) The Early Warning Register
- 11.2(9) Equipment
- 11.2(10) The Fee
- 11.2(11) A Key Date
- 11.2(12) Others
- 11.2(13) The Parties
- 11.2(14) Plant and Material
- 11.2(15) To Provide the Works
- 11.2(16) Scope
- 11.2(17) The Site
- 11.2(18) Site information
- 11.2(19) A Subcontractor
- 11.2(20) The Working Areas

Clause 11.2 Definitions

There are additional definitions in Main Options:

11.2(21) Activity Schedule (A)

11.2(22) The Bill of Quantities (B)

11.2(23) Defined Cost (A and B)

11.2(24) Defined Cost (C,D and E)

11.2(25) Defined Cost (F)

11.2(26) Disallowed Cost (C,D and E)

11.2(27) Disallowed Cost (F)

11.2(28) The People Rates (A)

11.2(29) The PWDD (A)

11.2(30) The PWDD (B)

11.2(31) The PWDD (C,D,E and F)

11.2(32) The Prices (A and C)

11.2(33) The Prices (B and D)

11.2(34) The Prices (F)

11.2(35) The Total of the Prices (D)

12 Interpretation and the law

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- Contract governed by the *law of the contract*
- No change unless in writing & signed by the Parties – *Project Manager* is not a Party
- This contract is the entire agreement
 - Pre-tender agreements not selected in a contract are thus invalid

13 Communications

- which can be read, copied and recorded
 - in writing; oral has no validity
- effective on receipt, or in accordance with communication system specified in the Scope
- respond within *period for reply*
- each notification & certificate to be separate from other communications

14 *Project Manager and Supervisor*

- *Project Manager and Supervisor*
 - acceptance of work does not change *Contractor's* responsibility
 - may delegate any action – in writing
 - may withhold acceptance for any reason. Can be a compensation event
- *only Project Manager can change Scope or a Key Date*
- *Client may replace Project Manager and Supervisor after notifying the Contractor*

15 Early warning

- *Contractor and Project Manager* notify early warning about price increase, delay or impaired performance of the works or any other matter which could change *Contractor's* total cost
- *Project Manager* enters early warnings in Early Warning Register
- Either *PM* or *C* call early warning meeting
- Seek solutions and revise Early Warning Register

16 Contractor's proposals

1) The *Contractor* may propose changes to reduce the amount the *Client* pays

2) The *Contractor* may propose adding an area to the Working Areas

In both cases, the Project Manager accepts the proposal or not by stating reasons

17 Requirements for instructions

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Clause 17 deals with ambiguities and inconsistencies

- Precedence statement not required as drafting takes account of it
- *Project Manager* or *Contractor* to notify ambiguity, inconsistency, illegal or impossible requirements as soon as either is aware
- *Project Manager* gives instruction resolving it
 - May lead to a compensation event

18 Corrupt Acts

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The Contractor:

- **does not do a Corrupt Act**
- **takes action to stop a Corrupt Act of a Subcontractor or supplier**
- **Includes a similar provision in its subcontracts and supply contracts**

- Based on a supervening event stopping the work (force majeure)
- Which neither Party could prevent
- The *Contractor* would not have allowed for it
- The *Project Manager* gives instruction how to deal with it
 - Could lead to compensation event
 - The *Client* can terminate if prevention continues

Section 2

The Contractor's Main Responsibilities

20 Contractor Provides the Works

20.1 Provide the Works in accordance with the Scope

- implications of *Contractor's Scope*
- *Project Manager* may instruct change in *Scope 14.3*
- *Contractor* puts the instruction immediately into effect or quote first
- *Contractor* obeys the *Project Manager* instruction per 27.3

24. Contractor's people

- *key persons* named in Contract Data
- substitution needs PM acceptance
- removal for reasons in one day – must have valid reason, e.g.
 - health and safety violation
 - not competent
 - aggressive behaviour

11.2(19) Labour broker -not a Subcontractor

26 Subcontracting

- **Contractor** liable as if it had not subcontracted
- Subcontractor's people & equipment as though they were **Contractor's**
- Subcontractor and his documentation subject to **PM's** acceptance
- **Contractor** should make use of NEC subcontracts; or **Client** specifies this requirement in Scope

27 Other Contractor responsibilities

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- 27.1 Design approval from Others
- 27.2 Give Others access to work being done
- 27.3 Contractor obeys instructions
- 27.4 Contractor acts in accordance with health and safety requirements stated in the Scope

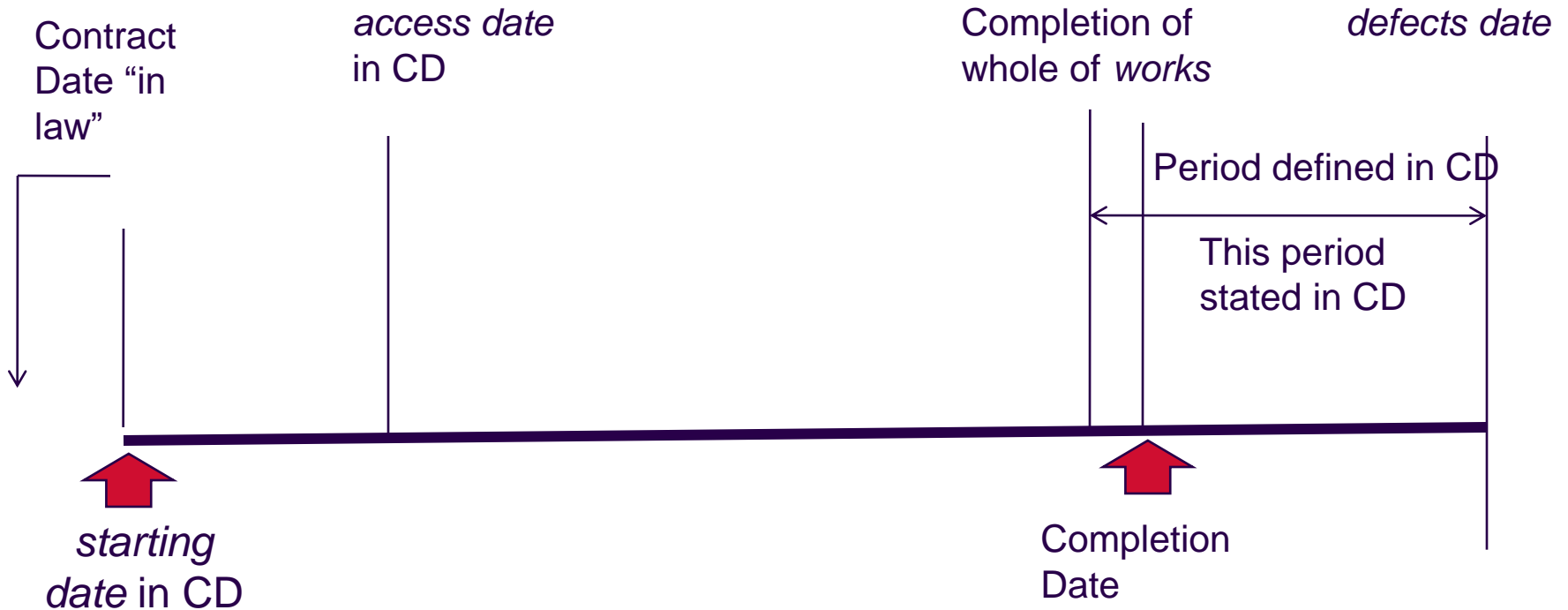
Section 3 Time

Planning and programming of the Works

Clause 31.2 programme to show

- *starting, access, Key Date(s) and Completion Date*
- *planned Completion*
- *Order and timing of operations*
- *Order & timing of work of the Client & Others*
- *Dates planned to meet Condition and allow others to do their work*
- *Provisions for*
 - *Float & time risk allowances*
 - *Health & safety requirements*
 - *Procedures set out in the contract*

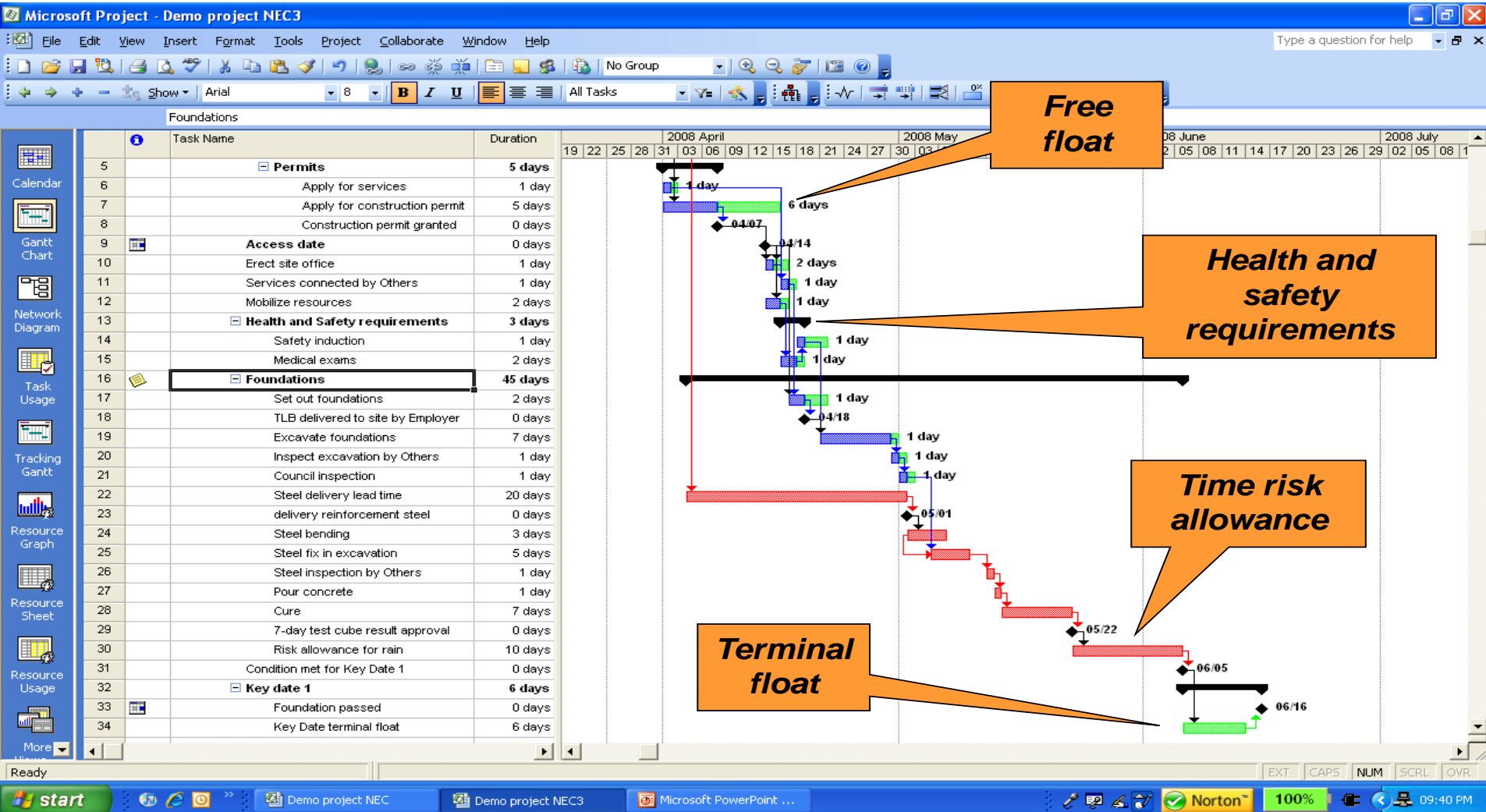
Principal dates in ECC4 showing early Completion



Completion Date is *completion date* in CD unless later changed

CD = Contract Data

NEC4 programme submitted for acceptance: Clause 31.2



31.3 Within 2 weeks of receiving Contractor's programme, Project Manager **MUST** either accept or not accepted for one of the listed reasons

- Failure of Project Manager to act treated as acceptance of programme (new for ECC4)

32.1 Lists what is to be shown on each revised programme

32.2 When revised programmes are to be submitted for Project Manager's acceptance

Take over & testing

35. Take over separate from Completion

- Option in Contract Data to not take over before Completion Date
- Otherwise take over within 2 weeks of Completion. Liability in clause 80.1 passes on take over
- *Project Manager* to certify within one week of it
- Scope to state whether tests are to be done before or after Completion

36 Acceleration

36. Acceleration - not to deal with delays

- Either *Project Manager* or *Contractor* may propose to the other an acceleration to achieve Completion before the Completion Date
- *Contractor* provides a quotation; not a compensation event. No criteria stated for acceptance hence subject to negotiation
- *Project Manager* changes Completion Date on acceptance

Section 4 Quality management

Testing & Defects

A Defect is

- **11.2 (6) A Defect is**
 - A part of the works which is not in accordance with the Scope or
 - A part of the works designed by the *Contractor* which is not in accordance with the applicable law or the *Contractor's* design which the *Project Manager* has accepted
- **Significance again for the quality of the *Client's* Scope**

- tests specified in the Scope
 - nature, when, where, who, & materials
- timing stated in the Scope
 - before payment & marking, before delivery, or Completion, or after take-over but before the *defects date* as part of a commissioning programme.
- requirements to notify in 40.3 & 43.2

43.1 Contractor corrects Defects even if Supervisor does not notify

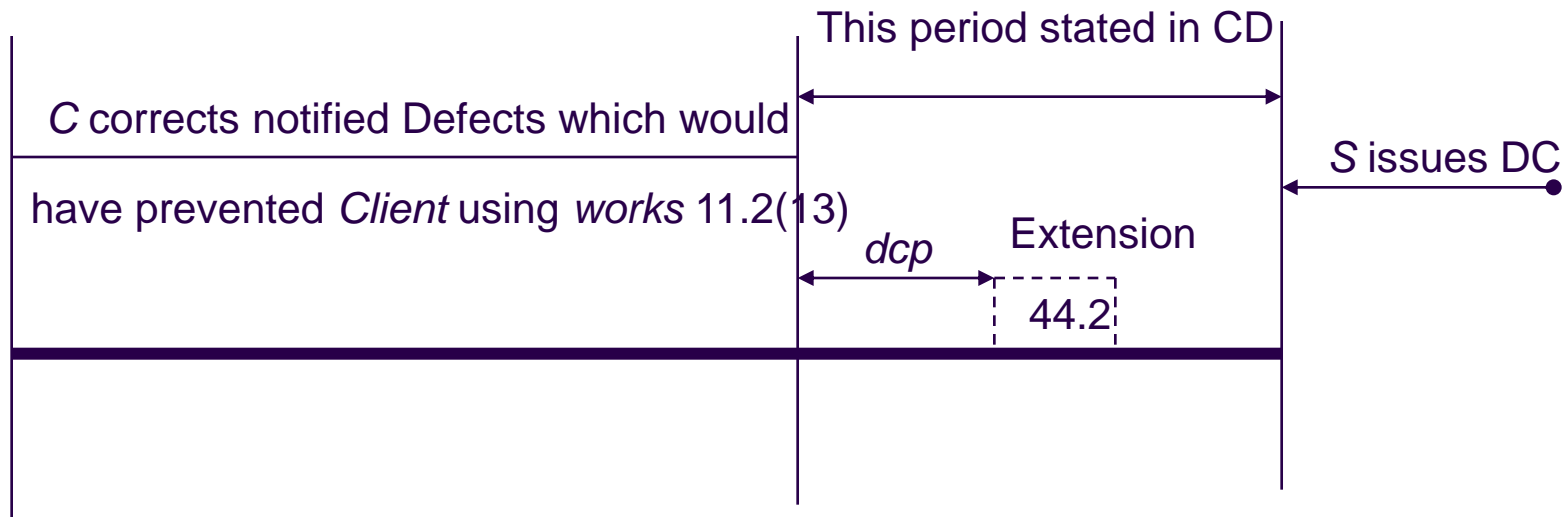
- Notify defects at any time between *starting date* and *defects date* but fix them within the *defect correction period* after Completion
- extend *defect correction period* or fix by others at *Contractor's cost*

Defects found by Contractor (C) or notified by Supervisor (S) before Completion

Starting date

Completion of whole of works

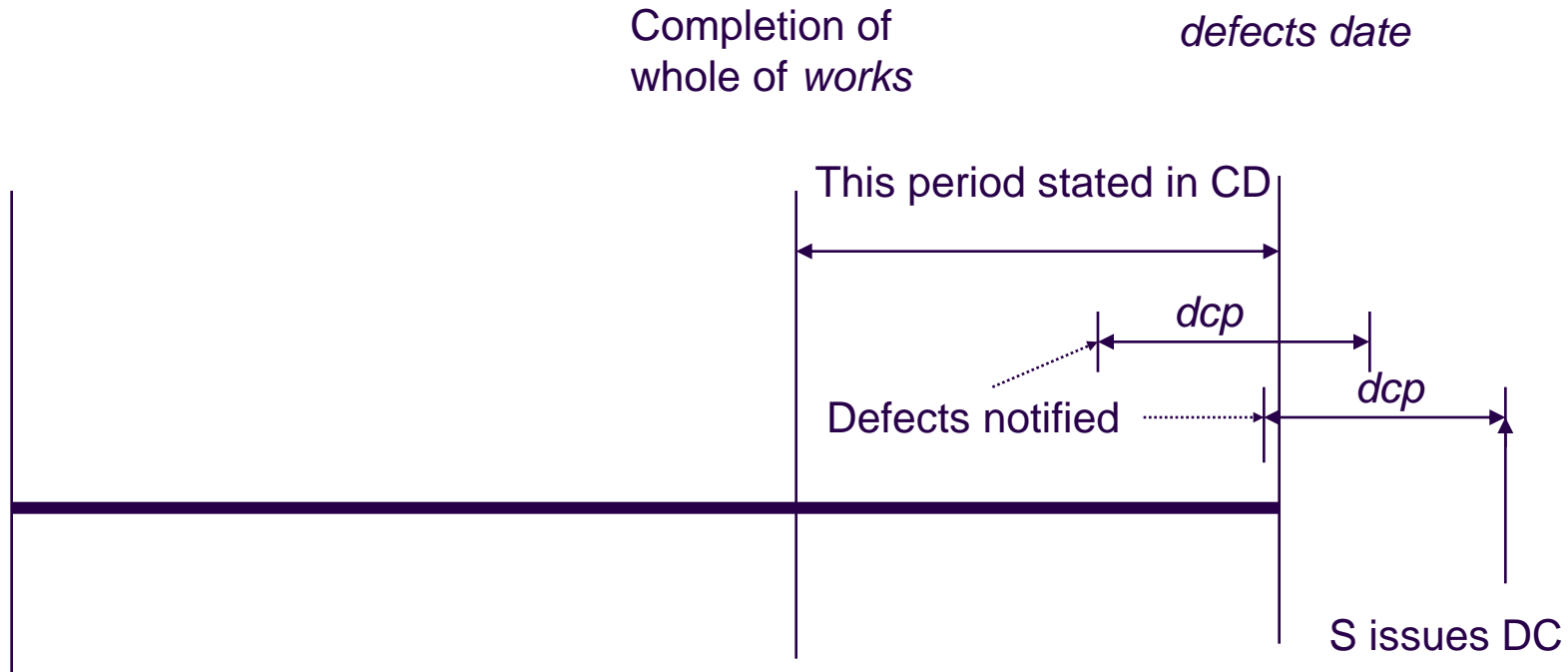
defects date



PM Project Manager; CD Contract Data; DC Defects Certificate; *dcp* defect correction period

If Defect not corrected within *dcp*, Project Manager assesses cost of correction by others & paid by C

Defects notified by Supervisor (S) after Completion & before defects date



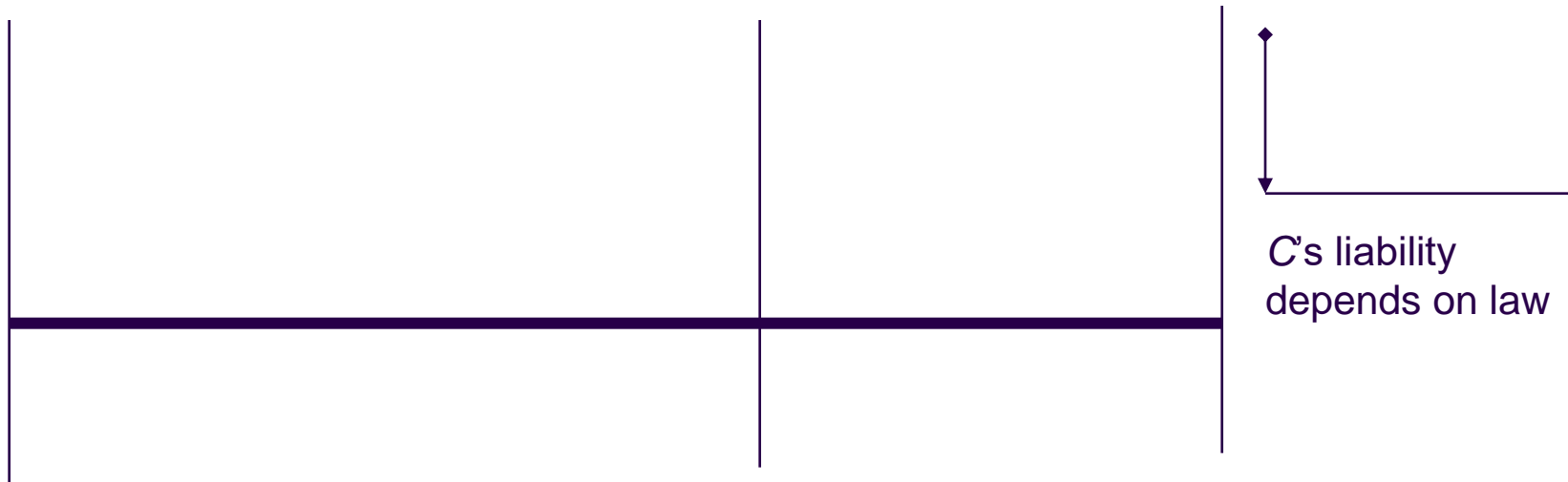
PM Project Manager, CD Contract Data; DC Defects Certificate; dcp defect correction period

If Defect not corrected within *dcp*, *PM* assesses cost of correction by others & paid by *C*

Defect found after defects date

defects date

C: Contractor



Section 5 Payment

**Certification & payment including
the main Options**

Assessing the amount due

50.1 *Project Manager* assesses the amount due

- at each assessment date
- considers any invoice received

50.2 Price for Work Done to Date (PWDD) per main option

- other amounts due or retained from *Contractor*
 - retention & inflation % of PWDD
 - other amounts; (as per secondary options or disallowed cost where applicable)

50.3 Retain 25% if no programme containing information which this contract requires

<u>Option</u>	<u>Prices</u>
A & C	Activity Schedule prices for activities 11.2(32)
B & D	Bill of Quantity rates and lump sums 11.2(33)
E & F	Defined Cost + Fee 11.2(34)

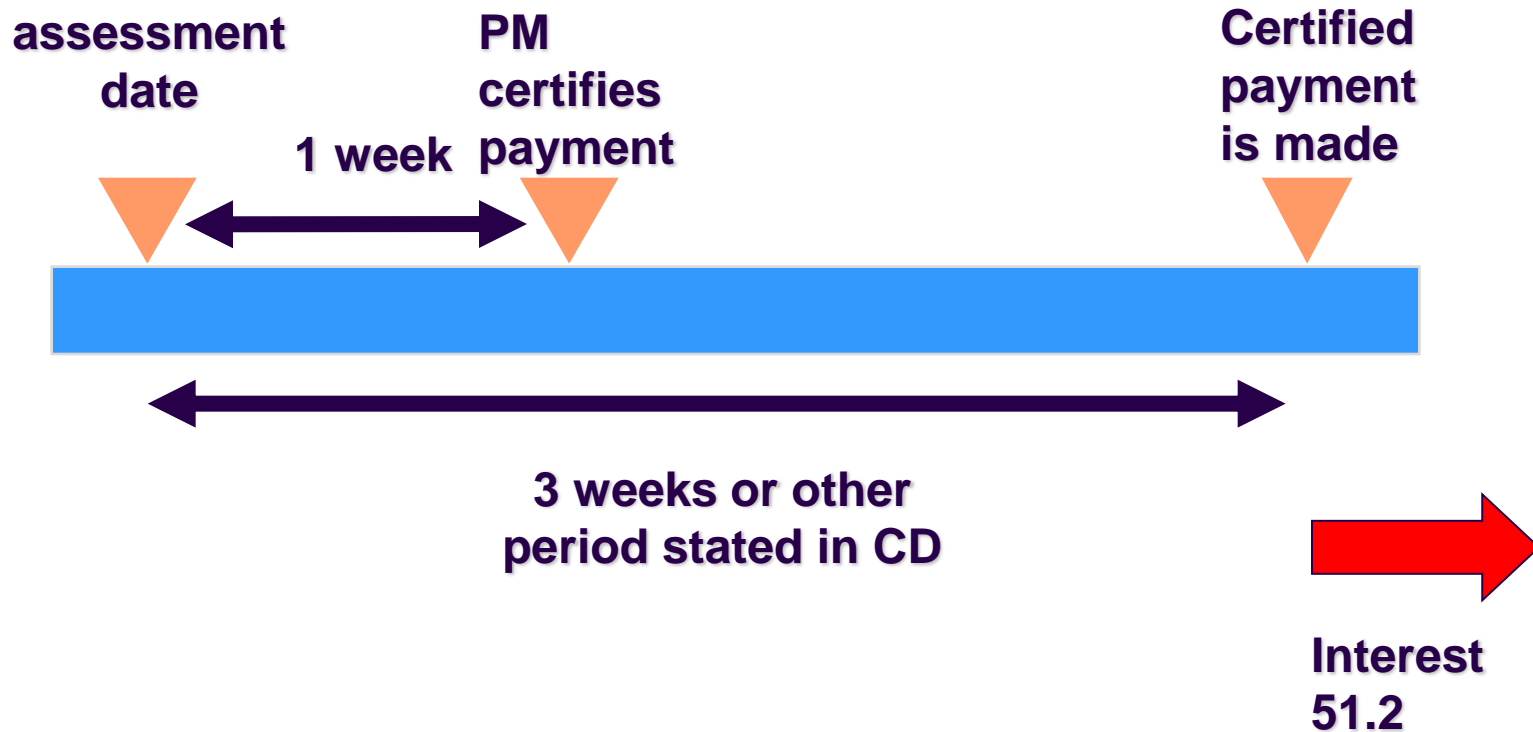
Price for Work Done to Date (PWDD)

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<u>Option</u>	<u>PWDD</u>
A	Total of the Prices for completed activities 11.2(29)
B	Quantities of completed work at Bill of Quantities rates and proportions of lump sums 11.2(30)
C to F	Defined Cost forecast to be paid before next assessment + Fee 11.2(31)

Payment time periods

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– Defined Cost (52.1)

- All the Contractor's costs which are not included in the Defined Cost are treated as included in the Fee
- Includes only amounts
 - calculated using rates and percentages stated in the Contract Data
 - and other amounts at open market or competitively tendered prices with deductions for all discounts, rebates and taxes which can be recovered

ECC4 Schedule of Cost Components

- list of definitions of identifiable components of cost (Defined Cost) for
 - People, Equipment, Plant & Materials, Subcontractors, Charges,
 - Manufacture and fabrication and design outside Working Areas
- tendered *fee percentage* applied to total Defined Cost

Payment of Defined Cost

<u>Option</u>	<u>Defined Cost</u>
A & B	11.2(23) Cost of the components in the Short SCC [compensation events only]
C to E	11.2(24) Cost of components in the SCC less Disallowed Cost [All payments]
F	11.2(25) Amount of payments due to Subcontractors for work which is subcontracted and the <i>prices</i> for work done by the Contractor itself less Disallowed Cost

Disallowed Cost

<u>Option</u>	<u>Disallowed Cost</u>
C to E 11.2(26)	Cost which <ul style="list-style-type: none">- is not justified by <i>Contractor's</i> accounts and records- should not have been paid to a Subcontractor...- was incurred only because the <i>contractor</i> did not....give an early warning...- correcting Defects after Completion etc
F 11.2(27)	As C to E plus <ul style="list-style-type: none">- is a payment to a Subcontractor for work which the Contract Data states that the <i>Contractor</i> will do itself or the <i>Contractor's</i> management

11.2(10) The Fee

- is the sum of the amounts calculated by applying the *fee percentage* to the Defined Cost
- *Fee percentage* is tendered by *Contractor* in Contract Data part 2
- All the *Contractor's* costs which are not included in the Defined Cost are treated as included in the Fee

Amounts due from secondary Options

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- X1 Price adjustment for inflation**
- X3 Multiple currencies**
- X6 Bonus for early Completion**
- X7 Delay damages**
- X14 Advanced payment to Contractor**
- X16 Retention**
- X17 Low performance damages**
- X20 Key Performance Indicators**
- Plus quotations and compensation events**

Section 6 Compensation Events

Change management

- Identify all events which lead to change
- use same procedure irrespective of pricing strategy or event
- use “cost plus” to value effect of the change event : no reference to tender, provisional sums or dayworks
- allow for alternative proposals
- deal with programme at the same time

- 21 listed in Section 6
- excess quantities & departure from method of measurement (Options B, D)
- changes in the law, (Option X2)
- advanced payment delay (Option X14)
- also in secondary Options X10.5, X12.3(6) & (7), X15.2, and possibly Z if used
- additional events listed in Contract Data 60.1(21)
 - (see User Guide for drafting advice)

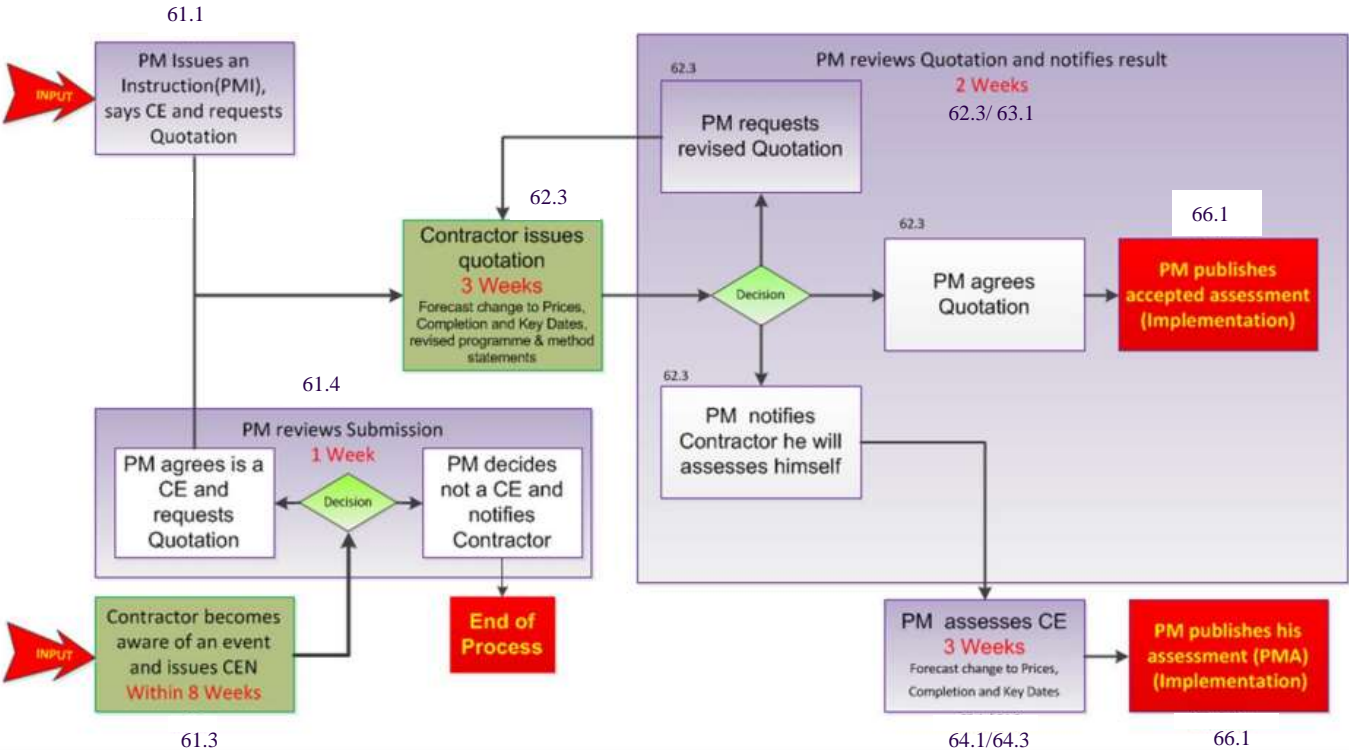
Compensation event admin.

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1. Notification
2. Quotation
3. Assessment: *Project Manager* assesses if *Contractor* does not or does it incorrectly
4. Implementation

Compensation Events NEC4

Compensation Event Procedure



Understand, comply and plan for dealing with compensation events in the contract timescales

Section 7 Title

Ownership of Plant and Material

- **Outside Working Areas title to Plant & Material passes if *Supervisor* has marked (70.1) & *Supervisor* marks if identified for payment (71.1)**
- **Otherwise title passes when brought within Working Areas**
 - **Ensure *Contractor* has title to Plant & Materials before payment is made**

73.1 *Contractor* has no title to objects of value

- **other materials as stated in the Scope**

Section 8 Liabilities and insurance

**Respective liabilities, insurance &
limitation of liability**

80.1 *Client's* liabilities listed & become compensation event 60.1(14)

- Legal claims payable for reasons stated
- Loss & damage to free issue Plant & Materials until *Contractor* has received them
- Loss & damage due to excluded events
- Loss or wear or damage after take over & after termination

81.1 Lists *Contractor's* liabilities

Risks lie where they fall

- What are C's main liabilities?
 - Client's indirect or consequential
 - Damage to surrounding property
 - Construction All Risks
 - Loss & damage to Equipment
 - Injury to & death of People
 - Design & workmanship
 - Adverse weather
 - Transport; marine
- Even if costs are covered by insurance effect of delay may not be

X18 Limitation of liability

- Can use Option X18 to limit *Contractor's* liability to the *Client* for
 - Consequential / indirect loss
 - Damage to *Client's* surrounding property
 - Latent Defect
 - Cap to total liability except for excluded matters
 - *end of liability date* in Contract Data

Section 9 Termination

Details about reasons, procedures and amounts due for termination

Reasons, procedures & amount due

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- **Either Party may terminate Contractor's obligation to Provide the Works; we do not cancel the contract**
- **Reasons for termination listed**
 - Note 4 weeks notice in 91.2 and 91.3
- **Procedures to suit reasons**
- **Amount due set-out in table**
- **Obtain good legal advice before terminating**

The end of NEC Jam Session 3



Next NEC Jam Session **ice-sa**

8 May 2025

Professional Service Contract PSC4

Introduction

**Thank you for your
participation**

Feedback is welcome

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