



### **NEC3 Engineering and Construction Contract**

### Simon McGrail

Head of Construction and Dispute Resolution, South



#### **OBJECTIVES**

- Understand rationale of NEC3; Ethos and Practical Use
- Focus on the commercial importance and application of Contract Data, Priced Activity Schedules and Assessing Compensation Events



#### **AGENDA**

- Introduction and Philosophy of NEC3
- Overview of NEC Standard Clauses and Structure
- Cost Components and Fees
- Activity Schedule
- Compensation Events



### **Philosophy**

#### Flexibility

- primary options give choice of pricing mechanism (lump sum to cost plus)
- secondary options allow specific employer policies to be addressed

#### Clarity

- conditions expressed more simply and clearly; non-legalistic language

#### Stimulus to Good Management

- emphasis on communications, co-operation and programming – from outset.



#### **Standard Forms**

- Engineering and Construction Contract (ECC)
- Engineering and Construction Subcontract (ECS)
- Engineering and Construction Short Contract
- Engineering and Construction Short Sub-contract
- Professional Services Contract
- Adjudicator's Contract
- Term Service Contract
- Framework Contract.



#### **Option Structure**

- 6 Main Options (pricing mechanism)
- 9 Core Clauses
- 18 Secondary Clauses (includes 'Z' clauses and Dispute Resolution options).



#### **Main Options**

- A Lump Sum with Activity Schedule
- B Lump Sum with Bill of Quantities
- C Target Cost with Activity Schedules
- D Target Cost with Bill of Quantities
- E Cost Reimbursable Contract
- F Management Contract



#### **Core Clauses**

- 1. General
- 2. Contractor's main responsibilities
- 3. Time
- 4. Testing and Defects
- 5. Payment
- 6. Compensation events
- 7. Title
- 8. Risks and insurance
- 9. Termination



#### **Secondary Options**

Various secondary option clauses (X, Y and Z prefixes)

Selected as appropriate – include payment and risk-related options:

X2: changes in the law

• X5: sectional completion

X6: bonus for early completion

X7: delay damages

X14: advance payment to Contractor

X15: limitation of Contractor's design liability

X16: retention

X17: low performance damages

Y(UK)2: HGCRA 1996 / LDEDCA 2009

Z: amendments to contract.



### **Schedules of Cost Components**

- Provide division between reimbursable items of cost, and items deemed to be included in the Fee
- Two types of schedule:

**Schedule of Cost Components** (SCC); used only with Options C, D and E for payment of Defined Cost and assessment of compensation events

**Shorter Schedule of Cost Components** (SSCS); used always with Options A and B for assessment of compensation events, and also under Options C & D if the PM and Contractor agree.



### **Schedules of Cost Components**

- Does not constitute a schedule of costs, simply a list of categories of costs that the Contractor can recover directly
- All other costs are deemed to be included in the Fee



### **Schedules of Cost Components**

Defines components of the cost of:

- People
- Equipment (non-permanent)
- Plant & Materials (permanent)
- Charges
- Manufacture & Fabrication
- Design
- Insurance



### **Schedules of Cost Components**

- In Contract Data part 2, the Contractor must ensure all offices such as satellite and head offices are included as Working Areas to ensure staff working in those areas are covered by the Defined Costs
- If not, the Contractor has been deemed to allow for the recovery of their costs in the fee (i.e. Contracts Manager).



#### **Contract Data**

- Part One provided by Employer
- Part Two provided by Contractor



#### **Fees**

- Contractor provides fee percentages under Contract Data Part 2
  - Direct Costs
  - Subcontracted Costs



#### **Fees**

- Typically, the Fee includes:
  - Profit / Head Office Overheads
  - Insurance Premiums
  - Corporation Tax
  - Advertising and Recruitment Costs
  - Sureties and Guarantees
  - Indirect Payments.



#### **Fees**

- Additional percentages are required within the SCC section of the Contract Data
  - people overheads
  - Adjustment of published equipment rates
  - design overheads
  - Working Areas overheads
  - manufacturing and fabrication



### **Activity Schedule**

Pertinent to Options A and C

- Activity Schedule is a list of activities prepared by the Contractor which he expects to carry out in providing the works.
- When it has been priced by the Contractor, the lump sum for each activity is the price to be paid by the Employer for that activity.
- The total of the prices is the Contractors price for providing the whole of the works, including for all matters which are at the contractors risk.



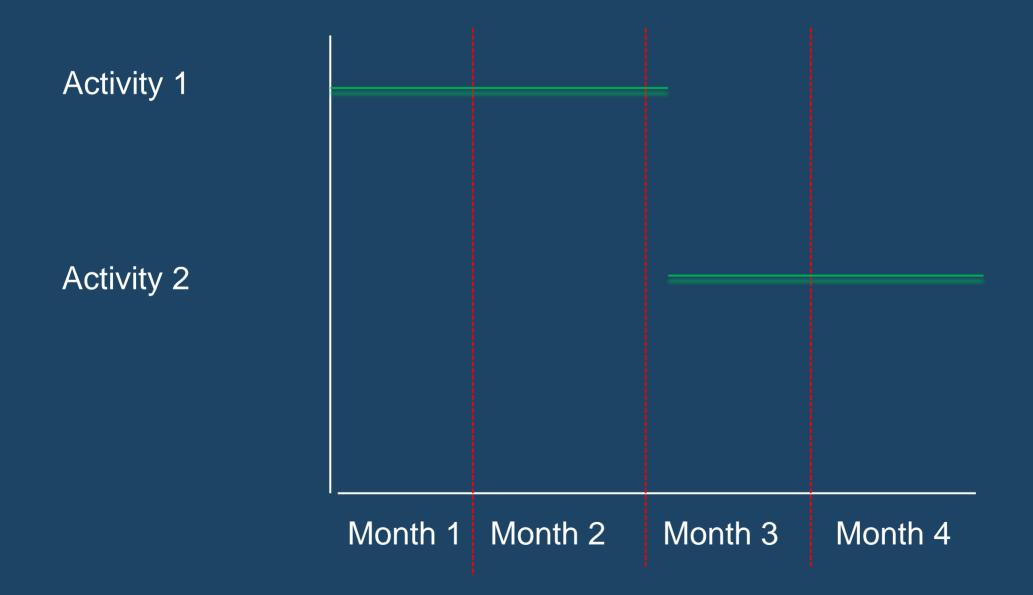
### **Activity Schedule**

- Clause 31.4 provides that the start and finish of each activity on the Activity Schedule are shown on each programme submitted.
- The activity schedule therefore allows the prices for activities to be identified and the programme the duration of the activities.
- Together the programme and the Activity Schedule allow the projected cash flow for the contract to be identified.
- Under Option A and C additional Clauses 54.2 and Clause 54.3 require the Activity Schedule and the Accepted Programme to be modified to remain compatible.



### **Activity Schedule**

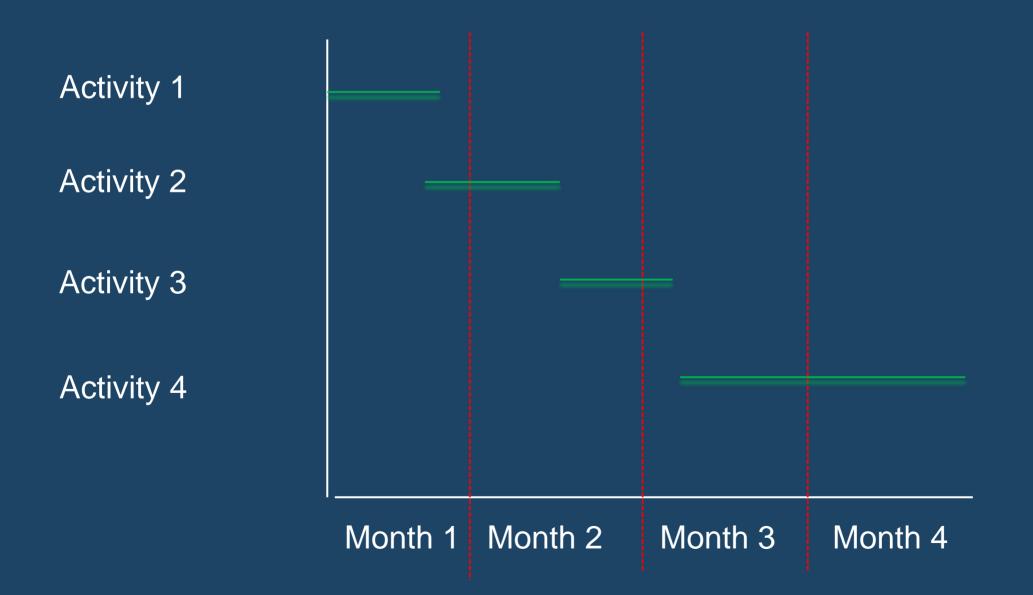
Poor Spread of Cash flow – Activities not Completed until Months 3 & 4





### **Activity Schedule**

Effective Spread of Cash flow – Activities Completed in Each Month





### **Compensation Events**

- Variations, claims and modifications are managed as 'compensation events' in NEC contracts.
- Importantly, notification of events and assessment of cost and time consequences is done at the time the event arises.
- This enables the project manager to take immediate decisions on how to deal with the event rather than trying to work out what cost and extension of time should be awarded for historic events.

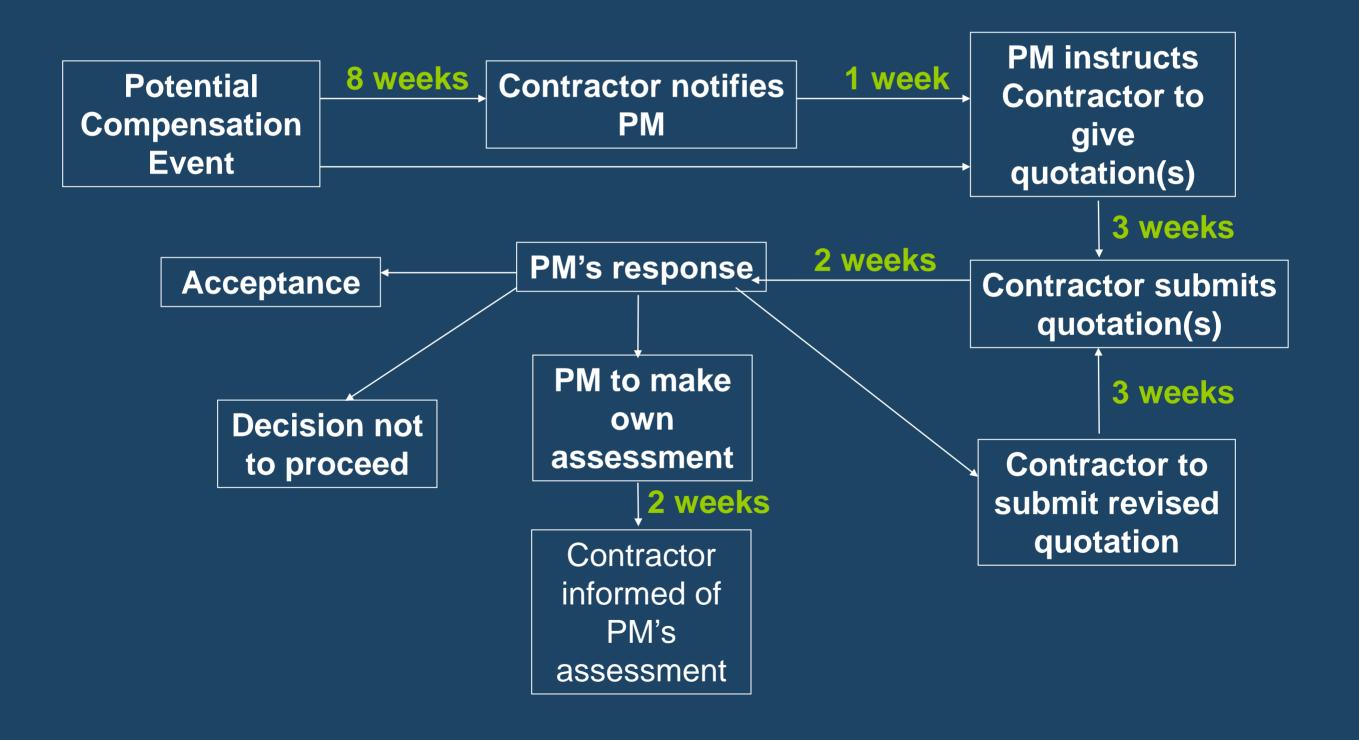


### **Compensation Events**

- Assessment of compensation events comprises the forecast change in cost and delay to completion.
- Both are assessed on the basis of the supplier's current intentions as shown on an updated programme and not from a historic tender document.
- The project manager is entitled to seek quotations for compensation events for different methods of dealing with the event, allowing the project manager to identify the effect on the contractor's operations of different solutions to the problem faced.
- This provides the information needed to allow a decision to be taken on the solution which best achieves the purchasers' objectives.



#### **CE Procedures and Timescales**





**QUESTIONS** 

