

**INTRODUCTION TO NEC 3  
ENGINEERING CONSTRUCTION  
CONTRACT  
OPTION C**

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# Course Content

- Introduction and overview of ECC Standard Forms
- Summary of the Core Clauses
- Main Option Clauses to Option C
- Secondary Option Clauses - Employer's Particular Requirements
- Contract Data Parts 1 and 2
- Shorter Schedule of Cost Components
- Main Principles underlying Option C
- Main Procedures required in Option C with emphasis on early warnings/Accepted Programme/Activity Schedule
- Compensation Event Procedures/Notices/Defined Cost
- Assessment of Compensation Events
- Risk Register

# ECC Contracts – Introduction

- Third Edition published July 2005 by Thomas Telford Ltd a wholly owned subsidiary of the Institution of Civil Engineers, London
- **Partnering philosophy** very different to traditional contracts FIDIC, GC/WORKS/1 and ICE
  - ◆ “10.1 The *Employer*, the *Contractor*, the *Project Manager* and the *Supervisor* shall act as stated in this contract and in a spirit of **mutual trust and co-operation**.
  - ◆ 16.3 At a risk reduction meeting, those who attend co-operate in:
    - seeking solutions that will bring advantage to all those who will be affected,....”

# ECC Contracts – Introduction

- **6 Options**

- ◆ A - Priced Contract with *Activity Schedule*
- ◆ B - Priced Contract with Bill of Quantities
- ◆ **C - Target Contract with *Activity Schedule***
- ◆ D - Target Contract with Bill of Quantities
- ◆ E - Cost reimbursable Contract
- ◆ F - Management Contract

**Option C is currently the most popular** in UK for civils and heavy building works

# ECC Contracts – Introduction

- Further contracts within the ECC family:
  - ◆ Engineering and construction subcontract
  - ◆ Engineering and construction short subcontract
  - ◆ Professional services contract
  - ◆ Engineering and construction short contract
  - ◆ Adjudicator's contract
  - ◆ Term service contract
  - ◆ Framework contract

# ECC Contracts – Introduction

- NEC has published 'Amendments September 2011' bringing all the ECC contracts in line with the recent amendments to the Housing Grants, Construction and Regeneration Act 1996 made by the Local Democracy, Economic Development and Construction Act 2009, which came into effect on 1 October 2011.

# ECC Contracts - Introduction

- **Main Option Clauses**

The provisions of W2 have recently (September 2011) been amended to bring them in line with the new legislation. The amendments are as follows:

- ♦ Subclause W2.3(7) has a new sentence added at the end:

"If the *Adjudicator's* decision changes an amount notified as due, payment of the sum decided by the *Adjudicator* is due not later than seven days from the date of the decision or the final date for payment of the notified amount, whichever is the later."

# ECC Contracts - Introduction

- **Main Option Clauses**

The provisions of W2 have recently (September 2011) been amended to bring them in line with the new legislation. The amendments are as follows:

- ◆ Subclause W2.3(8) has a new sentence added at the end:

**"The *Adjudicator* may in his decision allocate his fees and expenses between the Parties."**



# ECC Contracts - Introduction

- **Main Option Clauses**

The provisions of W2 have recently (September 2011) been amended to bring them in line with the new legislation. The amendments are as follows:

- ◆ Subclause W2.3(12) has been replaced with:

"The *Adjudicator* may, within five days of giving his decision to the Parties, correct the decision to remove a clerical or typographical error arising by accident or omission."

# ECC Contracts - Introduction

- Secondary Option Clauses
  - ◆ The payment provisions of the Acts are a Secondary Option
    - Y(UK)2 is used only when the Acts apply.

# ECC Contracts - Introduction

- **Secondary Option Clauses**

The provisions of Y(UK)2 have recently (September 2011) been amended to bring them in line with the new legislation. The amendments are as follows:

- ◆ Option Y(UK)2: Y2.1(1) is replaced with:

"The Act is the Housing Grants, Construction and Regeneration Act 1996 as amended by the Local Democracy, Economic Development and Construction Act 2009."

# ECC Contracts - Introduction

- **Secondary Option Clauses**

The provisions of Y(UK)2 have recently (September 2011) been amended to bring them in line with the new legislation. The amendments are as follows:

- ◆ Option Y(UK)2: Y2.2 third paragraph is replaced with:

"The *Project Manager's* certificate is the notice of payment to the *Contractor* specifying the amount due at the payment due date (the notified sum) and stating the basis on which the amount was calculated."

# ECC Contracts - Introduction

- **Secondary Option Clauses**

The provisions of Y(UK)2 have recently (September 2011) been amended to bring them in line with the new legislation. The amendments are as follows:

- ◆ Option Y(UK)2: Y2.3 is replaced with:

"IF either Party intends to pay less than the notified sum, he notifies the other Party not later than seven days (the prescribed period) before the final date for payment by stating the amount considered to be due and the basis on which that sum is calculated. A Party does not withhold payment of an amount due under this contract unless he has notified his intention to pay less than the notified sum as required by this contract."

# ECC Contracts – Introduction

## Core Clauses

- **All Options have the same core clauses:**
  - ◆ General
  - ◆ *Contractor's* main responsibilities
  - ◆ Time
  - ◆ Testing and Defects
  - ◆ Payment
  - ◆ Compensation Events
  - ◆ Title
  - ◆ Risk and insurance
  - ◆ Termination

# ECC Contracts - Introduction

- Main Option Clauses
  - ◆ Dispute resolution is a Main Option
    - Option W2 is used when the Housing Grants Construction and Regeneration Act, as amended by the Local Democracy, Economic Development and Construction Act 2009, (“the Acts”) apply.
    - Option W1 is used unless the Acts apply.

# ECC Contracts – Introduction

## Secondary Option Clauses

- For use where there are special requirements:
  - ◆ Price adjustment for inflation X1
  - ◆ Changes in the law X2
  - ◆ Parent company guarantee X4
  - ◆ Sectional Completion X5
  - ◆ Bonus for early Completion X6
  - ◆ Delay Damages X7
  - ◆ Partnering X12



# ECC Contracts – Introduction

## Secondary Option Clauses

- For use where there are special requirements:
  - ◆ Performance Bond X13
  - ◆ Advanced payment to the Contractor X14
  - ◆ Limitation of the *Contractor's* liability for his design to reasonable skill and care X15
  - ◆ Retention X16
  - ◆ Low performance damages X17
  - ◆ Limitation of liability X18
  - ◆ Key Performance Indicators X20

# ECC Contracts – Introduction

- 'Z' Clauses
  - ◆ bespoke additions and amendments
    - special attention required!

# Option C – Additional Clauses

Identified in **bold type** in the respective options

- Option C the **additional clauses** include:
  - ◆ Definitions (11.2)
    - Accepted Programme
    - Defined Cost
    - Disallowed Cost
    - Price for Work Done to Date
    - Prices
    - Fee
  - ◆ Requirement for **forecasting final cost**
  - ◆ Provision of **Subcontract data** (26.4)
  - ◆ Requirement for an **Activity Schedule**

# Option C – Additional Clauses

- Option C the additional clauses include:
  - ◆ relationship between programme and *Activity Schedule* (31.4)
  - ◆ *Contractor's auditable open book* accounting and record keeping (52.2 and 52.3)
  - ◆ pricing/assessing/implementing compensation events (62.2)
  - ◆ *Contractor's share* - gain/pain (53)
  - ◆ assessment of *Contractor's* share upon termination (93.4)

# Option C – Contract Data

- Part One
  - ◆ completed *by the Employer* at tender
- Part Two
  - ◆ completed *by the Contractor* when submitting his tender

## Option C – Contract Data

- **Part One** includes:
  - ◆ Names of the *Employer, Project Manager* and *Supervisor*
  - ◆ Documents containing the Works Information
  - ◆ Key dates and Completion/Completion Date
  - ◆ Site Information
  - ◆ Share ranges and *Contractor's* share percentages
  - ◆ Optional statements, for example:
    - Parent Company guarantee (X4)
    - Sectional Completion (X5)
    - Delay Damages (X7)

# Option C – Contract Data

- **Part Two** includes:
  - ◆ Name of *Contractor*
  - ◆ *Contractor's* key people
  - ◆ *Direct fee percentage*
  - ◆ *Sub-Contracted fee percentage*
  - ◆ Programme identity
  - ◆ *Activity Schedule* identity
  - ◆ Tendered total of the Prices i.e the target
  - ◆ *Working Areas* i.e. the Site and such other areas as the *Contractor* identifies

# Option C – Contract Data

- **Part Two** includes:
  - ◆ Percentages to cover:
    - Manufacture and Fabrication overheads
    - Design overheads
    - Working Areas overheads
    - People overheads



# Option C – Schedules of Cost Components

- Two SoCC
  - ◆ Standard (longer) SoCC
  - ◆ Shorter SoCC
  
- Shorter SoCC
  - ◆ used only for the assessment of compensation events when the *Project Manager* and the *Contractor* agree (63.15)

# Option C – Schedules of Cost Components

- SoCC lists the reimbursable cost elements:
  - ◆ People
  - ◆ Equipment
  - ◆ Plant and Materials
  - ◆ Charges
  - ◆ Manufacture and fabrication
  - ◆ Design
  - ◆ Insurance

# Option C – Main Principles

- No bill of quantities or schedule of rates
- **No re-measurement**
- *Contractor* tenders on Works Information
- *Contractor* provides programme and *Activity Schedule* with tender
  - ◆ if no programme identified in Contract Data – **25 per cent retention** pending submission of programme to Project Manager (50.3)
- Each activity on the *Activity Schedule* has a price which will be **the Contractor's estimate of Defined Cost plus overheads and profit**
- **Total of the Prices** on the *Activity Schedule* is the Tender total **(the target)**

## Option C – Main Principles

- *Contractor* tenders his **Fee** (*direct fee percentage* and *subcontracted fee percentage*)
  - ◆ deemed to include for everything not included elsewhere
- Tendered total of the Prices (the target) is **adjusted by compensation events only**
- Payment against the *Contractor's* recorded, auditable **Defined Cost** plus the *fee percentage*
- **Disallowed Cost** (11.2(25)) includes:
  - ◆ cost **not justified by the *Contractor's* accounts** and records
  - ◆ cost of correcting Defects **after Completion**
  - ◆ cost of correcting Defects due to *Contractor's* non compliance with a constraint stated in the Works Information

## Option C – Main Principles

- Invoices received but not yet paid, **can qualify** for inclusion in Defined Cost
- *Contractor's* share is **calculated upon Completion**

# Option C – *Contractor's* Share and Share Ranges

- Example 1

Share Range	<i>Contractor's</i> share percentages
Less than 80%	10%
From 80% to 90%	20%
From 90% to 100%	40%
Greater than 100%	50%

- ◆ tendered total of the Prices: £50M
- ◆ total Defined Cost plus the Fee: £38M
- ◆ £12M under target

# Option C – Contractor's Share and Share Ranges

- Example 1

- ♦ Contractor's share:

- 80% x £50M = £40M - £38M = £2M x 10% = £0.2M
- 90% x £50M = £45M - £40M = £5M x 20% = £1.0M
- 100% x £50M = £50M - £45M = £5M x 40% = £2.0M
- Above £50M = £50M - £50M = £0M x 50% = £0.0M

	<hr/>		<hr/>
	£12M	gain	£3.2M
	<hr/>		<hr/>

- ♦ payment: £38M + £3.2M = £41.2M
- ♦ Share ranges and Contractor's share percentages included in Contract Data Part 1 **need special attention at tender stage**

# Option C – Contractor's Share and Share Ranges

- Example 2

Share Range	Contractor's share percentages
Less than 80%	10%
From 80% to 90%	20%
From 90% to 100%	40%
Greater than 100%	50%

- ◆ tendered total of the Prices: €50M
- ◆ Defined Cost plus the Fee: €60M
- ◆ Contractor's share:
  - Greater than 100% = £10M x 50% = £5M pain
- ◆ payment = £60M less £5M = £55M



## Option C – Main Procedures

- Option C is not a cost plus contract

# Option C – Main Procedures

- Administration **complex and expensive**:
  - ◆ follow the required procedures
  - ◆ take **required actions** at the **required times**
    - *Contractor* to notify of compensation event **within 8 weeks** otherwise **no entitlement** to change in the Prices or Completion Date (61.3). (The exception being in circumstances when the *Project Manager* should have notified the event to the *Contractor* but did not).
    - significant **time bars** against the *Employer* (61.4, 62.6 and 64.4)

## Option C – Main Procedures

- Clause 61.4 has been extended to provide:
  - If the *Project Manager* does not notify his decision (in relation to a compensation event) to the *Contractor* within either
    - ♦ One week of the *Contractor's* notification or
    - ♦ A longer period to which the *Contractor* has agreed

The *Contractor* may notify the *Project Manager* to this effect. A failure by the *Project Manager* to reply within two weeks of this notification is treated as acceptance by the *Project Manager* that the event is a compensation event and instruction to submit quotations.

## Option C – Main Procedures

- Quotations for compensation events (62)
  - ◆ A new provision, 62.6 has been included as follows:-
    - If the *Project Manager* does not reply to a quotation within the time allowed, the *Contractor* may notify the *Project Manager* to this effect. If the *Contractor* submitted more than one quotation for the compensation event, he states in his notification which quotation he proposes is to be accepted. If the *Project Manager* does not reply to the notification within two weeks, and unless the quotation is for a proposed instruction or a proposed changed decision, the *Contractor's* notification is treated as acceptance of the quotation by the *Project Manager*.

## Option C – Main Procedures

- The *Project Manager's* assessments (64)
  - ◆ A new clause 64.4 has been included as follows:
    - “If the *Project Manager* does not assess a compensation event within the time allowed, the *Contractor* may notify the *Project Manager* to this effect. If the *Contractor* submitted more than one quotation for the compensation event he states in his notification which quotation he proposes to be accepted. If the *Project Manager* does not reply with two weeks of this notification the notification is treated as acceptance of the *Contractor's* quotation by the *Project Manager*.”

# Option C – Main Procedures

- Vital elements in the administration:
  - ◆ *Activity Schedule*
  - ◆ accounting procedures
  - ◆ Accepted Programme
  
- *Activity Schedule* and Accepted Programme **adjusted only by:**
  - ◆ compensation events (60.1)
  - ◆ acceleration agreements (36)
  
- Compensation events
  - ◆ effects on the target and the Completion Date should be assessed **as they arise**

## Option C – Main Procedures

- 19 compensation events (60.1(1) to (19))
  - ◆ 60.1(12) **physical conditions** within the Site
- Procedures are a **two-way** affair:
  - ◆ **early warning** of any event that may effect the Prices and/or the programme activities (16.1)
  - ◆ each party has an obligation to warn
  - ◆ meetings convened to discuss and decide on best actions
- If an activity will or has effected the Prices or the Accepted Programme **either party** notifies a compensation event (61.1 and 61.3)

## Option C – Main Procedures

- If the *Project Manager* agrees the compensation event he instructs the *Contractor* to submit a **quotation** (61.1):
  - ◆ quotation will be the *Contractor's estimate* of Defined Cost of the compensation event plus the *Fee*
  - ◆ if programme activities, Key Dates or the Completion Date have been or are likely to be affected the quotation must include a **revised programme** (62.2)



## Option C – Main Procedures

- *Project Manager* can notify the *Contractor* that he accepts the quotation and revised programme, or, after discussion with the *Contractor* as to ways in which the compensation event could be dealt with,
  - ◆ require the *Contractor* to submit a **revised** quotation and programme, or
  - ◆ make his **own assessment**

## Option C – Main Procedures

- Critical path network programme is **essential** for effective management
  - ◆ **programme updated** at intervals stated in the Contract Data (commonly one month) (32.2)
  - ◆ revised programme submitted to *Project Manager* for acceptance (32.2)
  - ◆ *Project Manager* can require updates at any time (32.2)
  - ◆ *Contractor* can submit when he chooses to
  - ◆ revisions should be provided with each quotation/assessment of a compensation event (62.2)

# Option C – Main Procedures

- Accepted Programme
  - ◆ only way to extend time
  - ◆ should be reviewed and revised at **4 week** intervals and as and when compensation events arise
  - ◆ **no provisions** for retrospective extensions of time
  - ◆ revised Accepted Programmes record the Completion Date current at the time the programme was accepted
  - ◆ planner/programmer involvement essential
  - ◆ promote good site management and feed back leading to compensation events

# Option C – Main Procedures

- Accounting of Defined Cost is paramount
  - ◆ *Contractor* must operate an **open-book accounting** system
  - ◆ cost centres for **each activity**
  - ◆ each cost element needs to be in place **before work starts**
  - ◆ can be **complex and expensive** to operate
  - ◆ *Project Manager* allowed access to audit (52.3)

# Option C – Main Procedures

- Defined Cost, calculated in accordance with **Schedule of Cost Components**, comprises the cost of:
  - ◆ People
  - ◆ Equipment used to Provide the Works
  - ◆ Plant and Materials
  - ◆ Charges
  - ◆ Manufacture and fabrication
  - ◆ Design
  - ◆ Insurance

# Option C – Main Procedures

- Costs not qualifying for inclusion in Defined Cost are **deemed included in the Fee**
- *Contractor's Fee* must include:
  - ◆ **all costs** - not merely notional Defined Cost
  - ◆ **allowance for Disallowed Cost** e.g. correcting Defects, Plant and Material failures
  - ◆ general **overheads and profit**
- **No mechanism** for adjustment of direct *fee percentage* or subcontracted *fee percentage*

# Option C – Main Procedures

- **Subcontracts** can be let on the NEC Subcontract:
  - ◆ Subcontractor bound by the **same core clauses** as the *Contractor*
  - ◆ Subcontractor may **not necessarily** be bound by the same option clauses and secondary option clauses
  - ◆ many Subcontractors would find it difficult to maintain and provide the necessary records of Defined Cost
  - ◆ **Option A** (Priced Contract with *Activity Schedule*) may be more appropriate for Subcontracts

## Option C – Main Procedures

- *Contractor* required to provide the *Project Manager* with regular **forecasts of final cost** (20.4)
  - ◆ 'S' curves comparing anticipated Defined Cost and progressive Defined Cost can be usefully employed



# Option C – Main Procedures

- Varied Works:
  - ◆ qualify as compensation events (60.1(1))
  - ◆ assessed by way of:
    - an **accepted quotation** (62.3), or
    - assessment of Defined Cost and forecast Defined Cost
  - ◆ except by pure coincidence the amount of the quotation or the assessment will not correspond with the amount paid to the *Contractor* – **he will be paid the Defined Cost of the varied work**
    - quotation or the assessment simply **moves the target**

## Option C – Main Procedures

- System for the **notification of early warnings** and compensation events should be set up:
  - ◆ use standard forms
  - ◆ set up before work commences
  - ◆ share with the *Employer/Project Manager*

# Option C – Schedule of Cost Components (“SoCC”)

- Two uses:
  - ◆ defines the cost components which are included in an **assessment of changes to the Prices** arising from a compensation event
  - ◆ defines the cost components for which the **Contractor will be reimbursed its Defined Cost**
- Compensation events are assessed by their effect on:
  - ◆ **forecast** Defined Cost
  - ◆ **recorded** Defined Cost

## Option C – Schedule of Cost Components (“SoCC”)

- People: **three categories** can be included in Defined Cost:
  - ◆ **First** - People directly employed by the *Contractor* and whose normal place of working is **within the Working Areas**
    - which **excludes** staff working at Head Office

# Option C – Schedule of Cost Components (“SoCC”)

- People: **three categories** can be included in Defined Cost:
  - ◆ **Second** - People directly employed by the *Contractor* whose normal place of working is not within the Working Areas, but who are working in the Working Areas

## Option C – Schedule of Cost Components (“SoCC”)

- People: **three categories** can be included in Defined Cost:
  - ◆ **Third** - People who are **not directly employed** by the *Contractor* but are paid by the *Contractor* according to the time worked while they are within the Working Areas
    - ★ e.g. specialist consultants who may be required as a result of a compensation event
- SoCC items **11, 12,13 and 14** list the specific cost components of People Defined Cost

# Option C – Schedule of Cost Components (“SoCC”)

- Equipment: Defined Cost of Equipment used **within the Working Areas**:
  - ◆ excludes Equipment cost covered by the percentage for Working Areas overheads
  
- Equipment Defined Cost includes:
  - ◆ payments at hire or rental rates for hire of Equipment **not owned** by the *Contractor*, *Contractor’s parent company* or another **part of the group** to which the *Contractor* belongs

# Option C – Schedule of Cost Components (“SoCC”)

- Equipment Defined Cost includes:
  - ◆ Payments at open market rates for Equipment which is not listed in the Contract Data but is:
    - ★ **owned** by the *Contractor*, or
    - **purchased** by the *Contractor* under a hire purchase or lease agreement, or
    - **hired** by the *Contractor* from the *Contractor’s* **parent company** or another **part of the group**



# Option C – Schedule of Cost Components (“SoCC”)

- Equipment Defined Cost includes:
  - ◆ Payments for equipment purchased for the work included in the Contract and listed with a time-related on cost charge in the Contract Data Part 2, of
    - the **change in value** over the period for which the equipment is required **and**
    - the **time-related on cost charge** stated in the Contract Data Part 2 multiplied by the period for which the equipment is required
- The **change in value** is the difference between the **purchase price** of the Equipment and the **sale price or open market sale price** of the Equipment at the end of the period for which it was required

## Option C – Schedule of Cost Components (“SoCC”)

- Assume purchase price of £50,000, notional sale price of £40,000, time-related on cost of £50 per day and a requirement period of 50 days, mid March to mid May

- ◆ Example 1:

- first interim assessment at end March

Change in value = £10,000 + time related on cost for 10 days at £50 per day = £500. Total payment £10,500

- second interim assessment at end April

Change in value = £10,000 + time related on cost for 40 days at £50 per day = £2,000. Total payment £12,000 (less previously paid)

# Option C – Schedule of Cost Components (“SoCC”)

- ◆ Example 1 continued:

- final assessment at end May (when actual sale price determined)

Determined **change in value** = £10,000 + **time related on cost** for 50 days at £50 per day = £2,500.  
Total payment £12,500 (less previously paid)

- ◆ Example 2:

- final assessment at end May (when actual sale price determined)

Determined **change in value** = £6,000 + **time related on cost** for 50 days at £50 per day = £2,500. Total payment £8,500 (less previously paid)

- If the *Project Manager* agrees these items of equipment may be assessed as if listed in Contract Data Part 2

# Option C – Schedule of Cost Components (“SoCC”)

- Equipment Defined Cost includes:
  - ◆ purchase price of Equipment consumed
  - ◆ (unless included in the hire or rental rates) payments for:
    - ★ **transporting** Equipment to and from the Working Areas other than for repair and maintenance
    - ★ **erecting** and **dismantling** Equipment
    - ★ **constructing, fabricating** or **modifying** Equipment as a result of a compensation event (including purchase of **materials**)
- Cost of **operatives** is included in “People” unless included in the hire rates

## Option C – Schedule of Cost Components (“SoCC”)

- Defined Cost of **Plant and Materials** intended to be included in the *Works* includes:
  - ◆ purchasing Plant and Materials
  - ◆ delivery to and removal from the **Working Areas**
  - ◆ providing and removing packaging
  - ◆ samples and tests
- Cost is credited with payments received for disposal of **Plant and Materials** unless the cost is disallowed

# Option C – Schedule of Cost Components (“SoCC”)

- Defined Cost of **Charges** includes:
  - ◆ payments to utilities for provision and use in the **Working Areas** of:
    - ★ water
    - ★ gas
    - ★ electricity
  - ◆ payments to public authorities and other properly constituted authorities of charges they are authorised to make in respect of the *works*

# Option C – Schedule of Cost Components (“SoCC”)

- Defined Cost of **Charges** includes:
  - ◆ items 43(a) – (i) of the SoCC including:
    - ★ cancellation charges arising from a compensation event
  - buying/leasing land
  - compensation for loss of crops
  - royalties
  - inspection certificates
  - charges for access to the **Working Areas**
  - specialist services

# Option C – Schedule of Cost Components (“SoCC”)

- Defined Cost of **Charges** includes:
  - ◆ **overhead costs** incurred within the Working Areas:
    - ★ apply the percentage for the **Working Areas overheads stated** in the Contract Data Part Two to the total Defined Cost of people items 11, 12, 13 and 14
  - includes provision and use of: equipment, supplies and services, but excludes accommodation for catering, medical and first aid facilities, recreation, sanitation, security, copying, telecommunications, radio and CCTV, surveying and setting out, computing and hand tools not powered by compressed air



# Option C – Schedule of Cost Components (“SoCC”)

- Defined Cost of **Manufacture and Fabrication** is:
  - ◆ cost of Manufacture and Fabrication of Plant and Materials:
    - wholly or partly designed specifically for the *works* and
    - manufactured or fabricated **outside** the **Working Areas**
  - ◆ total hours worked by employees multiplied by rates listed in **Contract Data Part 2**
  - ◆ an amount for **overheads** calculated by applying the percentage stated in the Contract Data Part Two for Manufacturing and Fabrication overheads

# Option C – Schedule of Cost Components (“SoCC”)

- Defined Cost of **Design** is:
  - ◆ cost of design of the *works* and Equipment done outside the **Working Areas**
  - ◆ total hours worked by employees multiplied by rates listed in **Contract Data Part 2**
  - ◆ an amount for **overheads** calculated by applying the percentage stated in the Contract Data Part Two for design overheads
  - ◆ cost of travel to and from the **Working Areas** for the categories of employees listed in the Contract Data Part Two

## Option C – Schedule of Cost Components (“SoCC”)

- Insurance: the following are deducted from Defined Cost:
  - ◆ cost of events against which the *Contractor* is required to insure
  - ◆ other costs paid to the *Contractor* by insurers

## Option C – Contract Data Part 2

- **Part Two** includes:
  - ◆ *Fee percentages* to be applied to the amount of Defined Cost
  - ◆ Definition of the **Working Areas**
    - extremely important for the *Contractor* to ensure that the Working Areas are properly and fully defined
    - implications on Defined Cost can be significant.
    - *Contractor* can **propose additions** to the Working Areas (15.1)

# Option C – Contract Data Part 2

- **Part Two** includes:
  - ◆ Time-related on-cost charges for:
    - listed Equipment to be added to the change in value of the Equipment calculated in accordance with item 23 of the SoCC
  - ◆ Rates for
    - Listed **special items** of Equipment

## Option C – Contract Data Part 2

- **Part Two** includes:
  - ◆ **Working Areas overheads** percentage:
    - ★ to be applied to the total Defined Cost of People – items 11, 12, 13 and 14 of the SoCC
    - ★ not for use with the Shorter SoCC

# Option C – Contract Data Part 2

- **Part Two** includes:
  - ◆ **People overheads** percentage:
    - to be used only when the *Project Manager* and the *Contractor* have **agreed** to use the Shorter SoCC for assessing Compensation Events
    - applied to people item 11 in the Shorter SoCC
    - Covers more extensive list of cost centres under item 41 of the Shorter SoCC
- Percentage for People overheads likely to be **significantly higher** than for Working Areas overheads

# Option C – Contract Data Part 2

- **Part Two** includes:
  - ◆ **People overheads** percentage:
    - ★ to be used only when the *Project Manager* and the *Contractor* have **agreed** to use the Shorter SoCC for assessing Compensation Events
    - ★ applied to people item 11 in the Shorter SoCC
    - ★ covers more extensive list of cost centres under item 41 of the Shorter SoCC
- Percentage for People overheads likely to be **significantly higher** than for Working Areas overheads



## Option C – Defined Cost

- **Amount due** to the *Contractor* :
  - ◆ **assessed** by the *Project Manager* at each assessment date
  - ◆ based on the *Contractor's Defined Cost* using the SoCC plus the **Fee** (50.1 and 50.2)
- Defined Cost (11(23)) is:
  - ◆ the amount of **payments** due to Subcontractors
  - ◆ the **cost of the components** in the SoCC for other work
  - ◆ **less** any Disallowed Cost

## Option C – Defined Cost

- Costs not falling within the SoCC are **deemed** to have been allowed in the Fee (52.1) e. g:
  - ◆ head office charges and overheads
  - ◆ profit
  - ◆ insurance premiums, including employers liability
  - ◆ corporation tax
  - ◆ bonds, sureties and guarantees

# Defined Cost – Option C

- **Disallowed Cost** is cost which:
  - ◆ is **not justified** by the *Contractor's* accounts and records
  - ◆ should not have been **paid to a Subcontractor** or supplier
    - e.g. paying a Subcontractor **more** for a compensation event than is included in the accepted quotation or assessment
  - ◆ has been incurred only because the *Contractor* did not:
    - follow an acceptance or procurement procedure **stated** in the Works Information
    - give an **early warning** which he could have given

# Defined Cost – Option C

- **Disallowed Cost** is cost which:
  - ◆ arises from correcting Defects **after** Completion
  - ◆ arises from correcting Defects caused by the Contractor **not complying** with the Works Information
  - ◆ is for Plant and Materials **not used** (after reasonable waste)
  - ◆ is for resources **not used** or **not taken away** when required by the Project Manager
  - ◆ is for preparation for and conduct of adjudication or proceedings of the **tribunal**

## Option C – Assessing Compensation Events

- Works Information includes work [A] which is to be replaced by work [B]
  - ◆ compensation event is assessed as the difference between the **forecast Defined Cost of [B]** and the **forecast Defined Cost of [A]**
    - **the Fee** is then added
- Changes to the Prices are assessed as the effect of the compensation event upon (63.1):
  - ◆ Defined Cost of the **work already done**
  - ◆ forecast Defined Cost of the **work not yet done**
  - ◆ resulting **Fee**

## Option C – Assessing Compensation Events

- If the effect of a compensation event would be to reduce the total Defined Cost, the Prices are **not reduced unless** the compensation event is:
  - ◆ a **change to the Works Information**, other than one proposed by the *Contractor* and accepted by the *Project Manager*, or
  - ◆ a **correction of an assumption** made by the *Project Manager* in assessing an earlier compensation event
  
- Delay to the Completion Date is assessed as the length of time **planned Completion** is later than planned Completion shown on the **Accepted Programme**

## Option C – Assessing Compensation Events

- *Contractor* is required to show on **each** programme submitted for acceptance (31.2):
  - ◆ planned Completion
  - ◆ **time risk** allowances
  - ◆ float

# Option C – Assessing Compensation Events

- *Contractor's time risk* allowances:
  - ◆ allowances attached to the duration of each activity or to the duration of parts of the *works*
  - ◆ *owned by the Contractor* as part of his realistic planning to cover his risks
  - ◆ *should be preserved* in the assessment of any delay to planned Completion



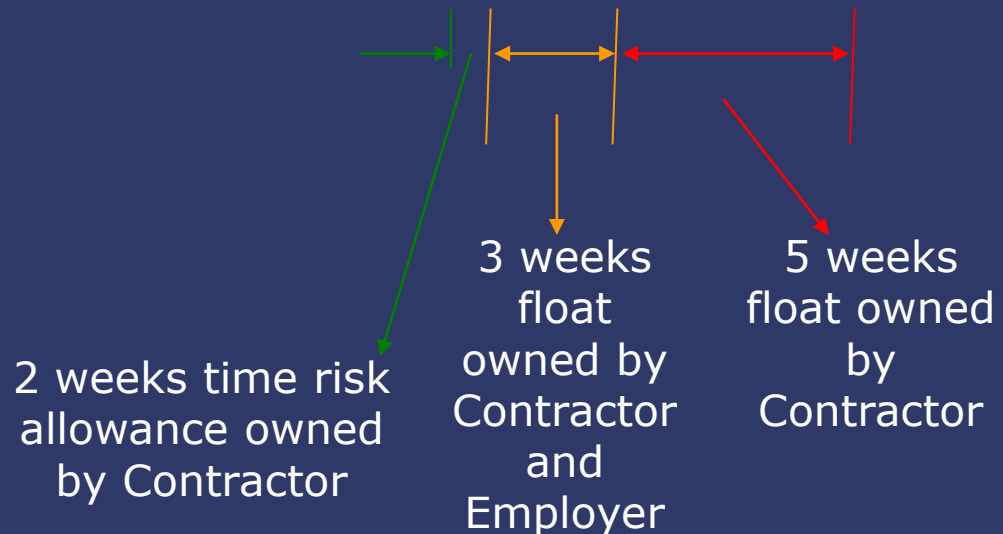
# Option C – Assessing Compensation Events

- **Float** is any spare time within the programme
  - ◆ float in the programme **before planned Completion** is available to either party to mitigate or avoid any consequential delay to planned Completion
  - ◆ float **between planned Completion and the Completion Date** is not available to the *Employer* – it is **owned** by the *Contractor*
- Delay to **planned** Completion due to a compensation event will result in the same delay to the Completion Date (63.3)
- Assessment of Compensation Event **will not be revised** if the forecast upon which the assessment is based proves to be wrong (65.2)

# Option C – Time Allowances, Float and Completion



Programme



## Option C – Assessing Compensation Events

- First stage in assessing whether planned Completion will be delayed is to adjust the Accepted Programme **leaving intact the time risk allowances** (63.5)
  - ◆ if **planned** Completion is not delayed the Completion Date remains unchanged

# Option C – Assessing Compensation Events

- Assessment of the effect of a compensation event includes:
  - ◆ cost and time risk allowances for matters which have a **significant chance** of occurring and are at the *Contractor's* risk (63.6)
  - ◆ time risk allowance will be greater when the work is uncertain and there is a **high chance** of a *Contractor's* risk happening

# Option C – Assessing Compensation Events

- Assessments are based upon the following **assumptions** (63.7):
  - ◆ *Contractor* reacts **competently** and **promptly** to the compensation event
  - ◆ additional Defined Cost and time due to the event are **reasonably incurred**
  - ◆ Accepted Programme can be changed
- Important when assessing compensation events to get forecasts of Defined Cost and time implications as accurate as possible
  - ◆ if later recorded information proves a forecast to have been wrong, there can be **no revision** to the assessment (65.2)

# Option C – Contractor's Responsibility

- Option C does not deal with design liability
  - ◆ where a design and build contract is silent on the point the design and build *Contractor* will have a **fitness for purpose obligation**
  - ◆ in circumstances where the *Contractor* has design responsibility, either in full or in part, the *Contractor* should take particular care to **ensure that Option X15 forms part of the contract**

## Option C – Contractor's Responsibility

- No provision for liquidated damages in the core clauses:
  - ◆ **Option X7** must be incorporated if delay damages are to be liquidated
  - ◆ **Option X17** must be incorporated if low performance damages are to be liquidated
- Absent options X7 and X17 the *Contractor* will be exposed to the risk of **un-liquidated damages**

## Option C – Risks and Insurance

- 80 and 81 identify the risks which lie with each party respectively
- 80 sets out the *Employer's* risks
  - ◆ all risks not carried by the *Employer* (i.e. those in 80.1 and any additional *Employer's* risks stated in the Contract Data) are carried by the *Contractor* (80.1)
- 84 contains a table identifying the risks which are to be insured by the *Contractor*



# Option C – Summary

- **Commercial success** depends upon:
  - ◆ **initial target**
  - ◆ The **maintaining the integrity** of the initial target by proper operation of the compensation event procedures
  - ◆ keeping **Defined Cost to a minimum**
  - ◆ **innovative ideas** with **attendant savings** in Defined Cost

# Option C – Main Procedures

- Accepted Programme
  - ◆ should be reviewed and revised regularly (normally at monthly intervals) and as and when compensation events arise
  
- Compensation events
  - ◆ their effects on the target should be assessed as they arise
  
- Non-compliance with the actions and timetables:
  - ◆ can have disastrous effects in terms of the *Contractor* obtaining his entitlements, particularly failure to give timely notices

## Option C – Summary

- Accounting of Defined Cost is paramount:
  - ◆ the system should be efficient and quick
  - ◆ wherever possible use project specific standard forms
- Working Areas
  - ◆ considerable care required by *Contractor* when defining