

**ice-sa**  
**NEC Forum**

NEC training sponsored by  **ecs**

**FREE**

**Thursday 13th March**  
**4 pm - 6 pm**

**Procurement and Contract Strategies**

**Presented by Sharmraj Bauchoo**

QS, Construction Contract Adviser,  
Project Manager, Adjudicator, Arbitrator

# 10 NEC Jam Sessions Topics for 2025

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13 <sup>th</sup> February	The NEC4 Family of Contracts - Introduction
13 <sup>th</sup> March	Procurement and Contract Strategies
10 <sup>th</sup> April	ECC4 - Core Clauses
8 <sup>th</sup> May	PSC4 - Introduction
12 <sup>th</sup> 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 <sup>th</sup> July	ECC4 - Early Warnings and Compensation Events
14 <sup>th</sup> August	ECC4 – Dispute Avoidance
11 <sup>th</sup> September	Contract Strategy: The use of Option X29 : Climate Change
9 <sup>th</sup> October Presented by Dr Jon Broome	Contract Strategy: The Secondary Option 'X' clauses including preparation of the associated Contract Data.
13 <sup>th</sup> 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.

**I**ntegrity

**P**rofessionalism

**C**ollaboration

**C**ourage

# Procurement Strategies **ice-sa**

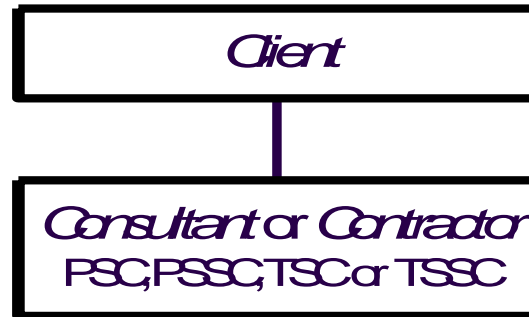
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- **How to split project in smaller components if/ when required?**
- **Who does Engineering, Procurement and Construction?**
- **Who is managing interfaces?**

# Traditional Approaches **ice-sa**

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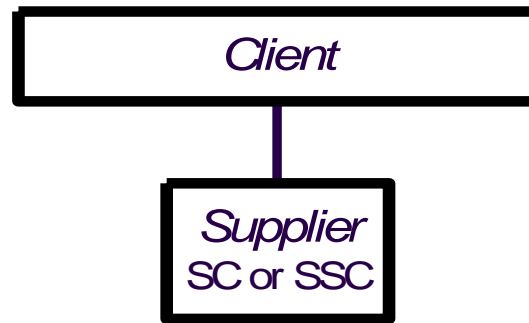
A simple relationship between a *Client* and *Consultant* or *Contractor* for pre-construction or construction related services.



# Traditional Approaches **ice-sa**

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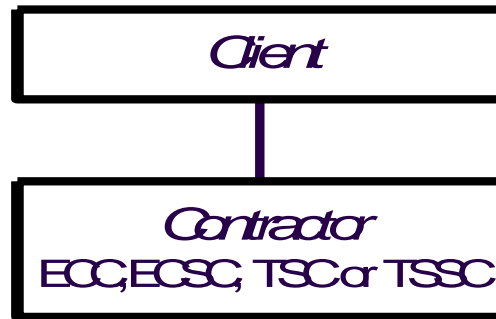
A simple relationship between a *Client* and *Supplier* for the local and international procurement of goods.



# Traditional Approaches **ice-sa**

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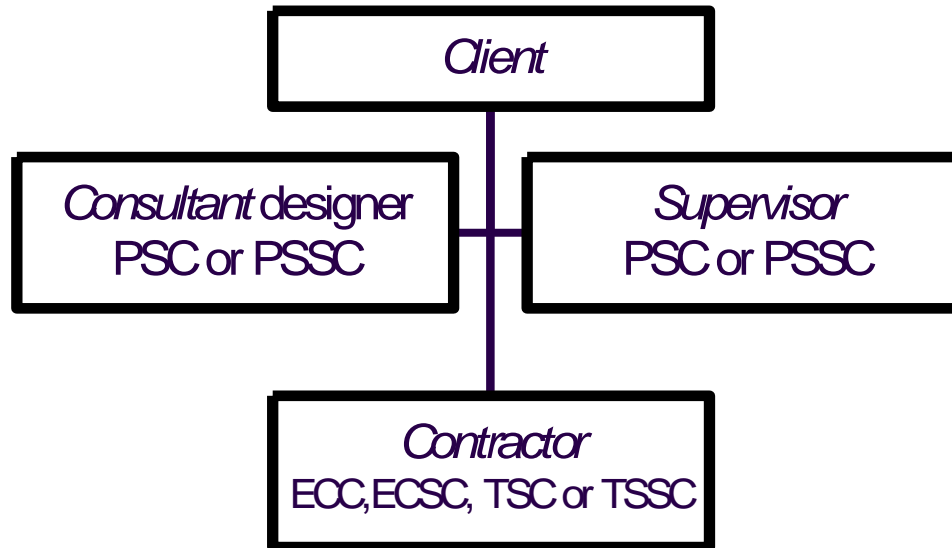
A simple contractual relationship for construction works to be carried out for a *Client* by a *Contractor*.





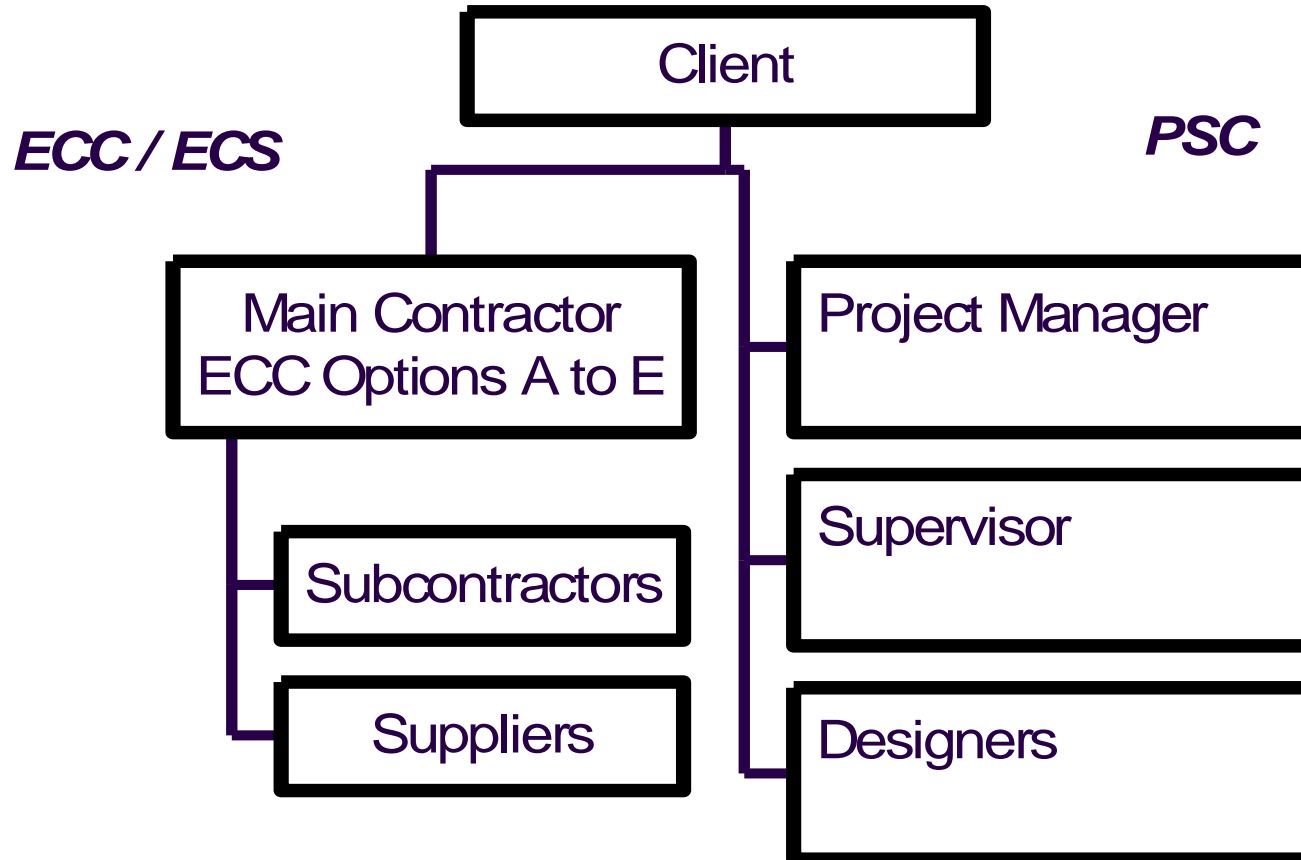
# Traditional Approaches

The classic traditional procurement route in the construction industry is with a consultant designing works on behalf of a *Client* who engages a *Contractor* to construct.

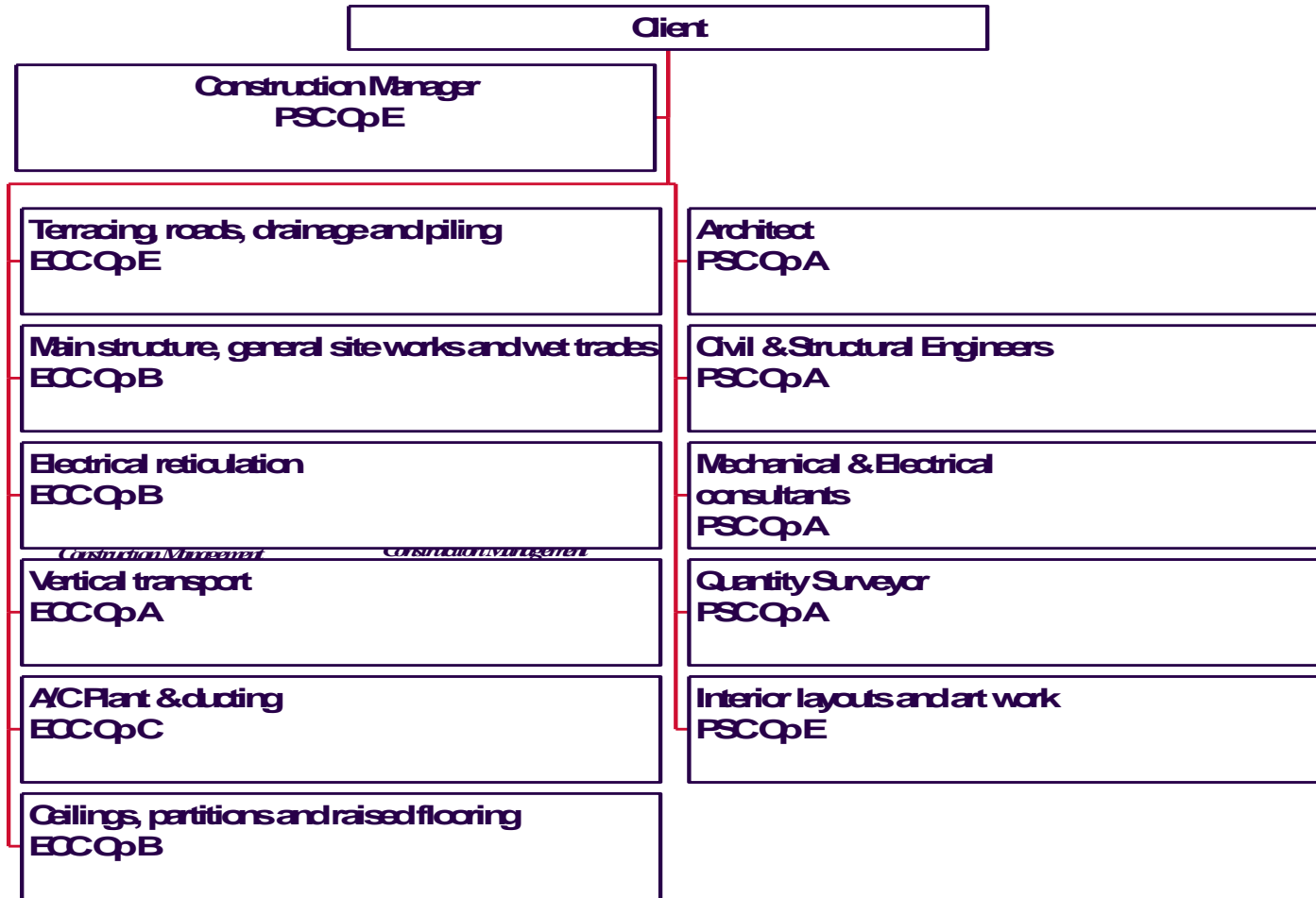


# Single main contract

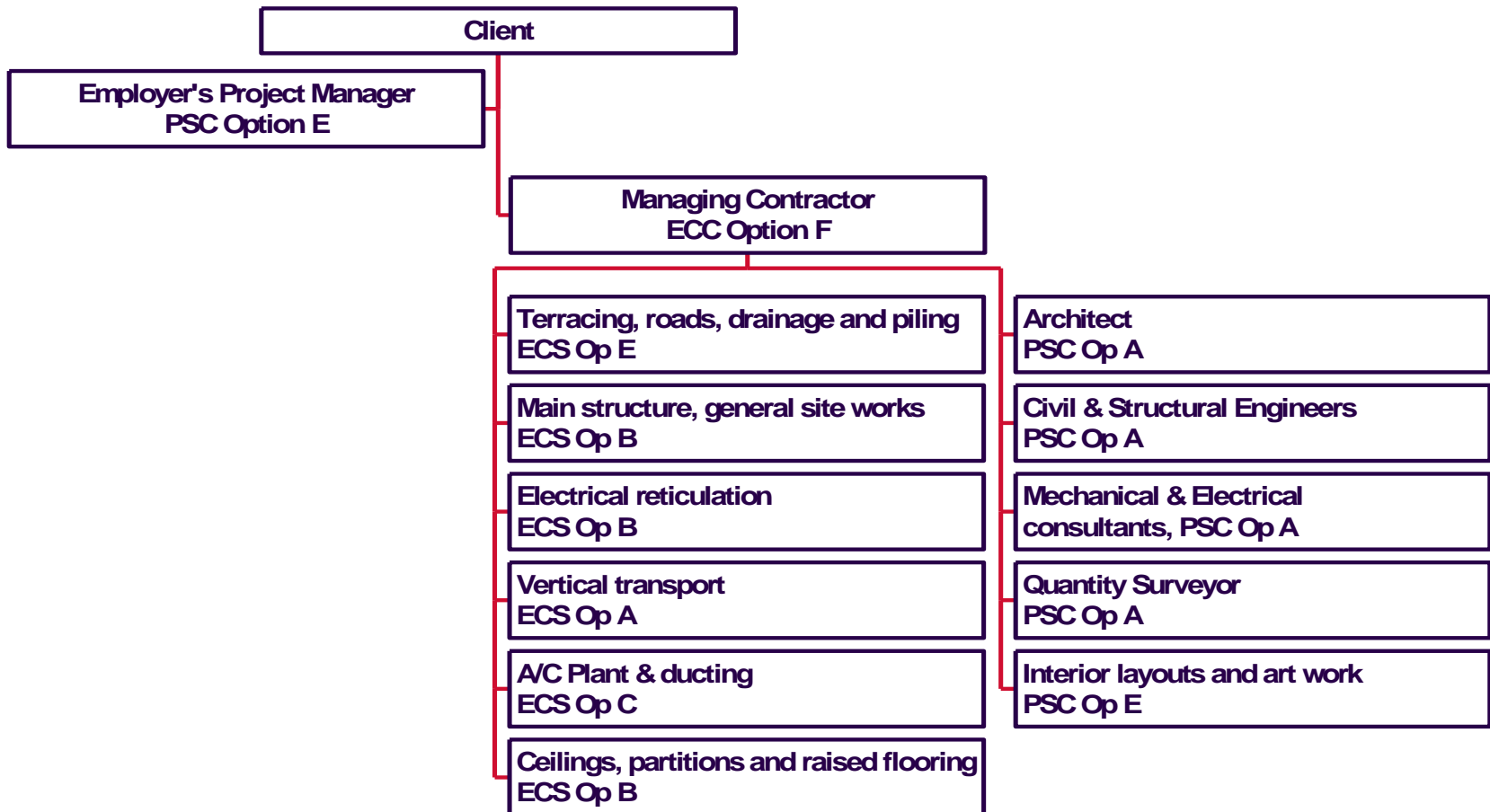
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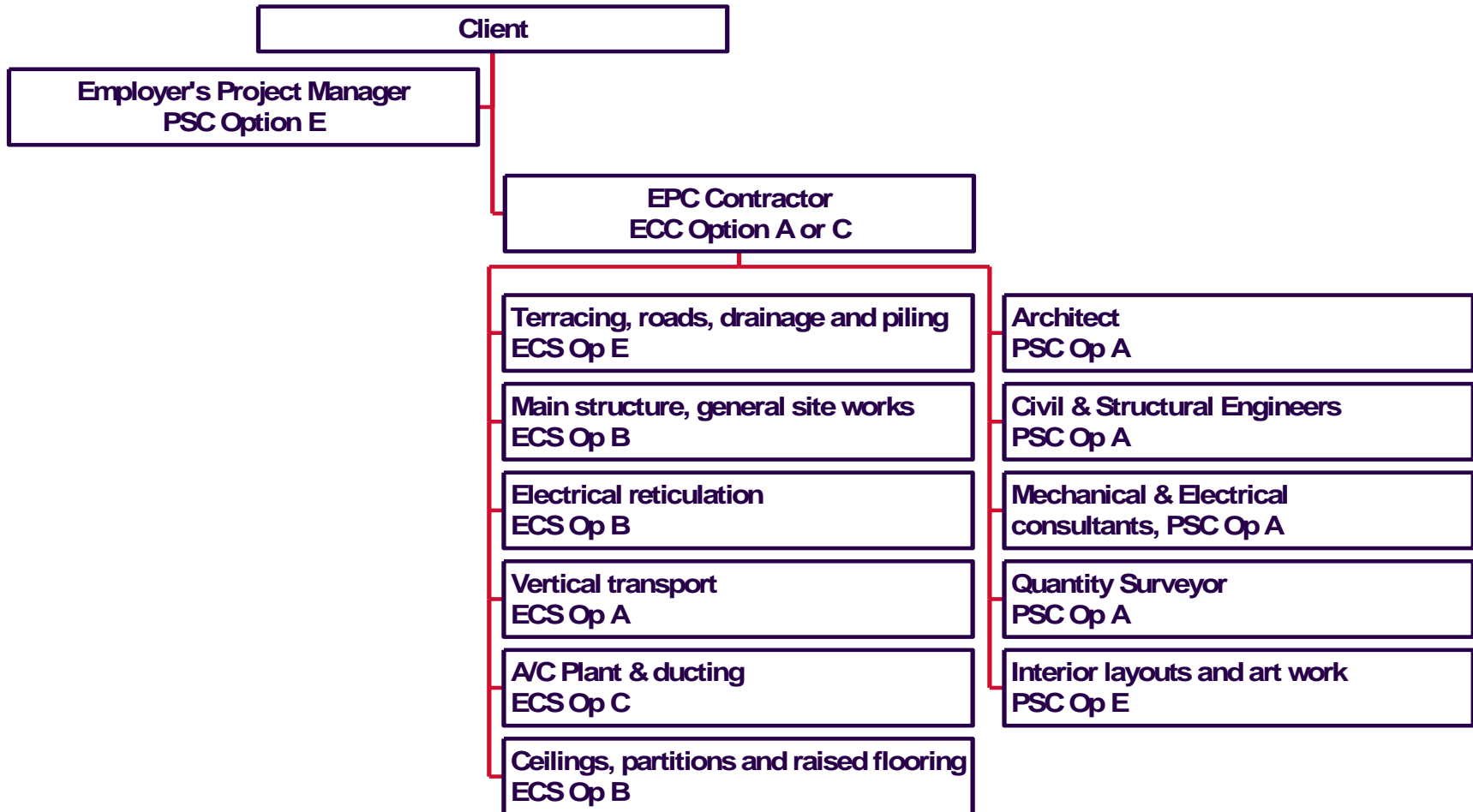
# Combination of Construction & ice-sa EPCM



# Management contracting



# EPC contracting



# Contract Strategies

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**Allocation of risk and incentive**

**Choosing the right Options**

**(Main and Secondary Options)**

# 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*

# 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



# ECC4 main Options

Choose one of these:

**A. Priced contract with Activity Schedule**

- total of prices for each activity the *Contractor* expects to carry out

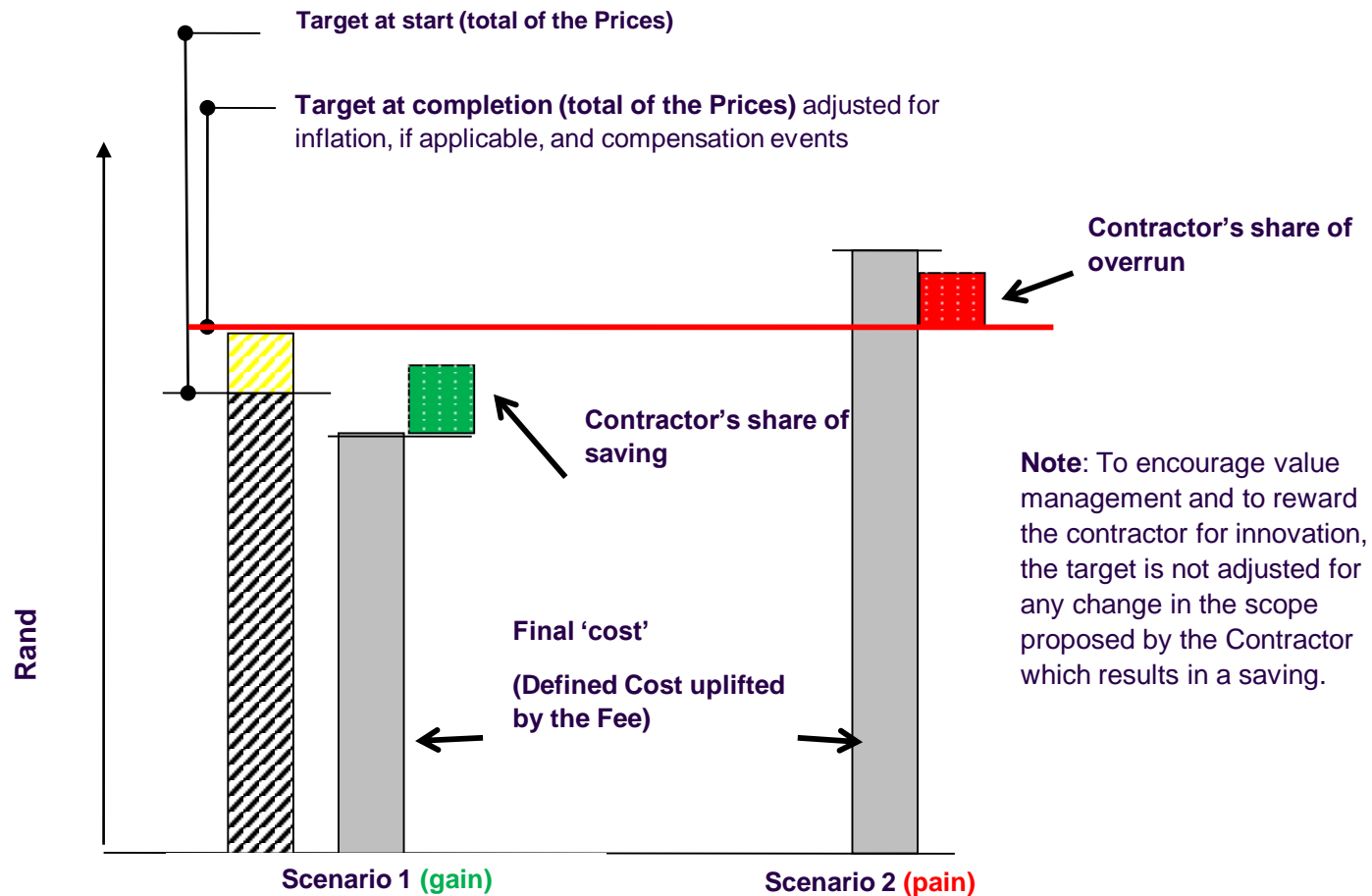
**B. Priced contract with Bill of Quantities**

- total of work items x rate prices

**C. Target contract with Activity Schedule**

- Pay Defined Cost plus Fee; compare total with total of Activity Schedule; share difference

# Target cost: Pain & Gain



## D. Target contract with Bill of Quantities

- Pay Defined Cost-plus Fee, compare total with total of re-measured Bill, share difference

## E. Cost reimbursable contract

- Pay Defined Cost-plus Fee; forecast total

## F. Management Contract

- Pay for direct Works, Subcontractors and the *Contractor's Fee* for managing them; forecast total

# Which main option?

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- **Who is proving the design?**
- **Extent of scope definition at tender**
- **Design phase time available**
- **Is construction expertise needed to do design?**
- **Availability of construction resources in Client team**

# Options for Resolving and Avoiding Disputes

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- **W1 – used where Adjudication is the method of dispute resolution**
- **W2 – specific to the UK**
- **W3 – used where a Dispute Avoidance Board is the method of dispute resolution.**

# Secondary Options & Risk Allocation

Ref	Option	Objective	Risk to the Client	Risk to the Contractor	Commercial	Legal	Time related
X1	Price adjustment for inflation	Client takes the risk of inflation (as defined by the selected indices)	✓		✓		
X2	Changes in the law	Client takes the risk of changes in the law after the Contract Date	✓			✓	
X3	Multiple currencies	Client takes the risk of exchange rates exceeding the parameters stated in the Contract Data	✓		✓		
X4	Ultimate Holding company guarantee	Obtain the guarantee from the subsidiaries parent company		✓		✓	
X5	Sectional Completion	Requires the Contractor to complete the part of the works in advance of the rest (X6 & X7 may be included)		✓	✓		✓
X6	Bonus for early completion	Provide incentive to the Contractor for early Completion	✓		✓		✓
X7	Delay Damages	(Opposite of the above), monies deducted if the Contractor is in delay		✓	✓		✓

# Secondary Options & Risk Allocation

Ref	Option	Objective	Risk to the Client	Risk to the Contractor	Commercial	Legal	Time related
X8	Undertakings to the Client or others	Enables the Contractor and the subcontractors to give undertakings to Others and the Client	✓		✓	✓	
X9	Transfer of Right's	Transfer of Rights from the subcontractor to the Client	✓			✓	
X10	Information Modelling	Enables development and use of information Modelling		✓	✓		
X11	Termination by the Client	Gives the Client the right to termination of Conventions.		✓	✓	✓	
X12	Multi-Party Collaboration	Multi-partner agreement			✓	✓	
X13	Performance bond	Performance bond imposed by the Client		✓	✓	✓	
X14	Advanced payment	Allows advanced payment to be made to the Contractor e.g. long lead in items, pure advanced payment	✓		✓		

# Secondary Options & Risk Allocation

Ref	Option	Objective	Risk to the Client	Risk to the Contractor	Commercial	Legal	Time related
X15	The Contractor's design	If applied, this limits the Contractor's liability for his design down to reasonable skill & care	✓		✓	✓	
X16	Retention ( Not with F )	Retention deducted from the Contractor. This could be a percentage or a retention free amount		✓	✓		
X17	Low performance damages	Monies deducted if the performance standards are not achieved e.g. output of a power plant		✓	✓		
X18	Limitation of Liability	This limits the overall liability of the Contractor	✓		✓	✓	
X20	Key Performance Indicators ( Not with X12 )	Provide incentive to the Contractor as defined in the incentive schedule	✓	✓	✓		
X21	Whole Life Cost	Changes in the Scope to reduce costs			✓		
X22	Early Contractor Involvement ( Option C & E )	Early Contractor's input in environmental, Planning and Budget.			✓		✓
X29	Climate Change	Provide goal settings in support of reduction of negative effects of the project to climate changes	✓	✓	✓	✓	



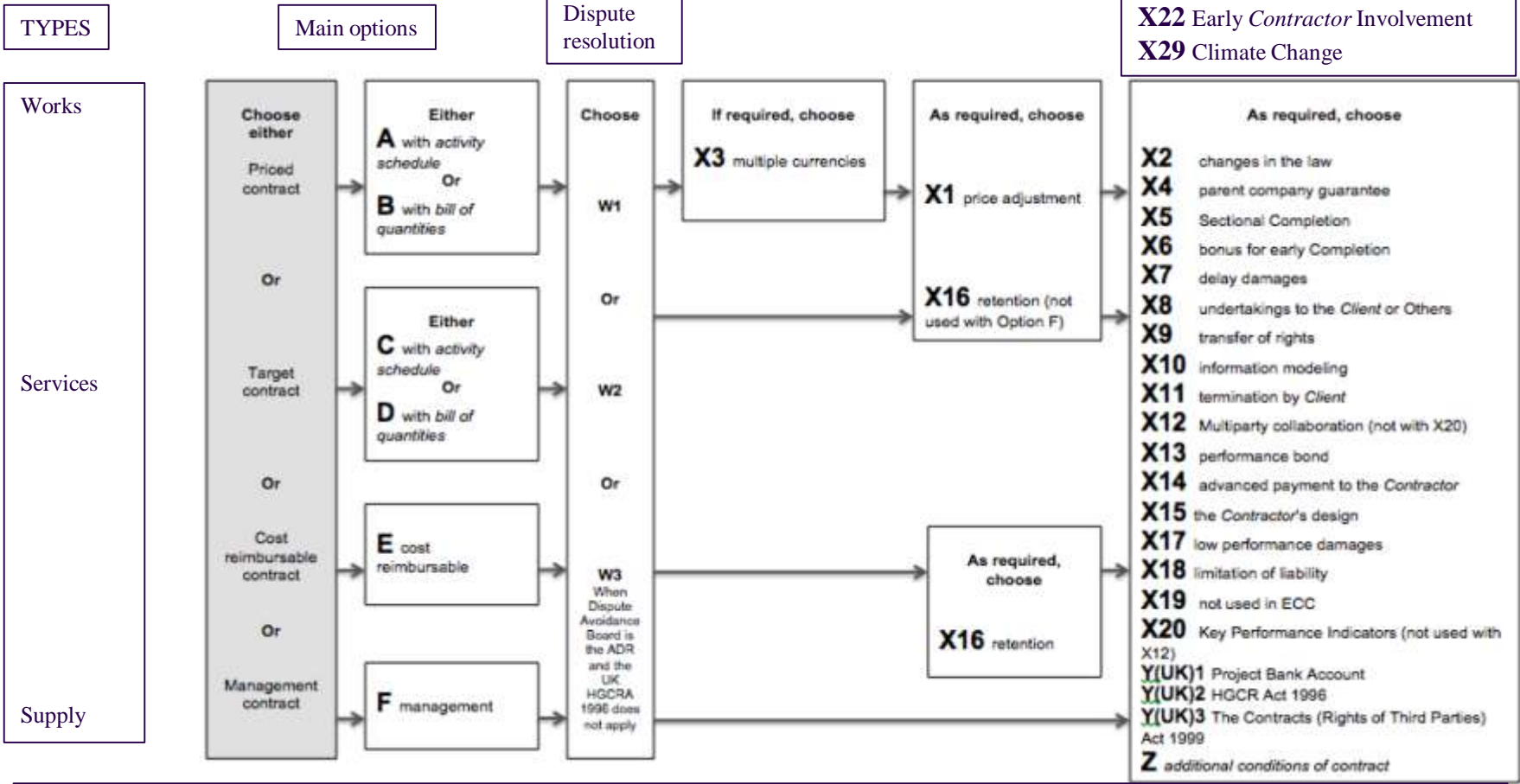
# Early Contractor involvement ice-sa FC4 or X22

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- Bring *Contractor* on board early by process of competitive selection
- Assist with finalisation of design and clause 31.2 programme
- Benefit of *Contractor's* experience
- Review all design work for constructability
  - See potential savings
  - Switch from Options A to C or E?

- **X29.12: C must report performance against targets periodically. Proposals for improvement must be submitted if targets aren't met. Payments or penalties are applied based on performance.**
- **X29.13: The contract's data section includes a Performance Table, and if no Climate Change Plan is identified, the clauses detail how one should be established and managed.**

# The NEC Contract Structure



Add: Contract Data, Schedule of Cost Components, Scope, Site Information (as appropriate)

# People's attitudes ...

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- **Successful use of NEC depends on**
  - **Aligning the interests of the Parties**
  - **Foresighted, co-operation between the Parties**
  - **Proactive behaviour**
  - **Direct effort towards the future**
- **NEC provides financial incentives to co-operate**

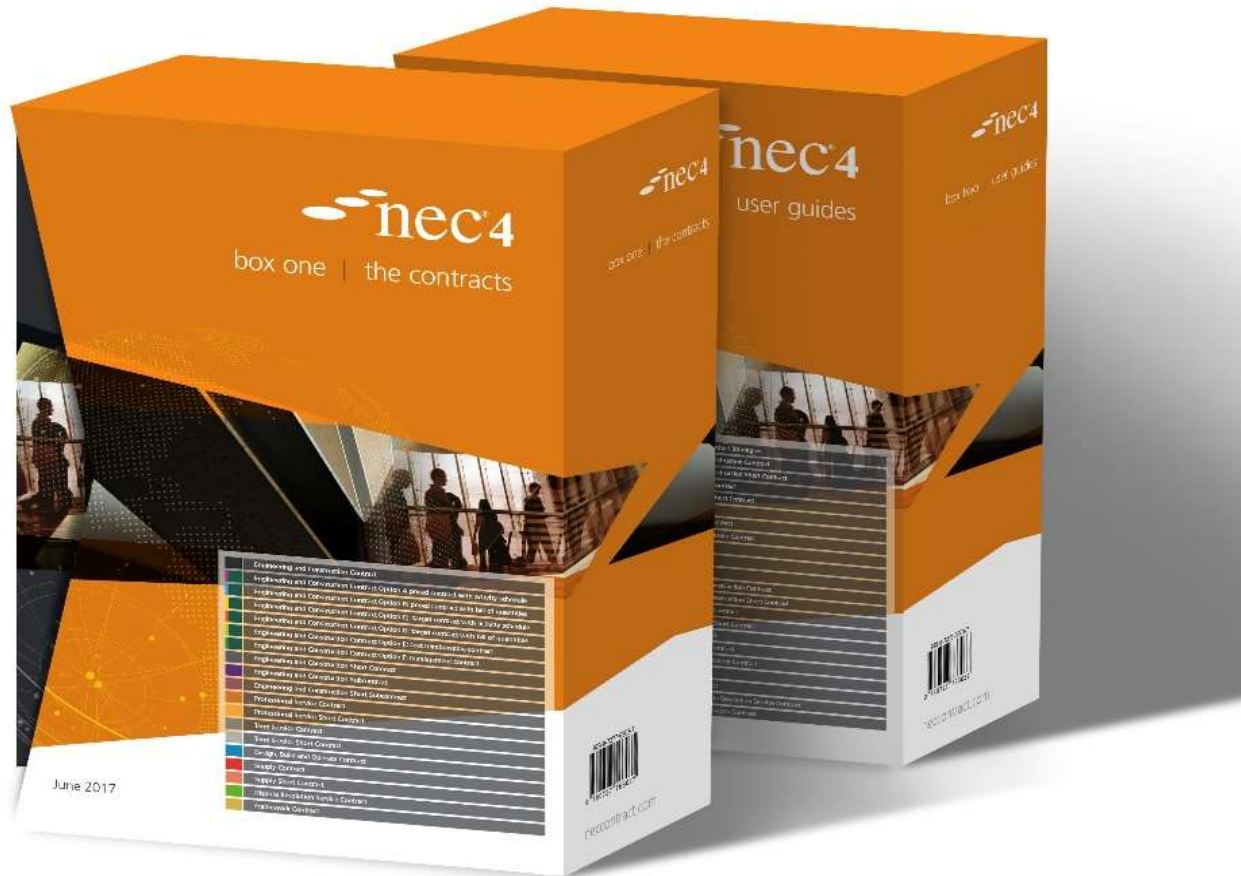
# Getting the best out of NEC

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- **The Parties - from top management down - and their agents *MUST* be prepared to enter spirit of NEC's drive for change and be driven by its better standards of management by all**
- **Start off with a traditional adversarial “provisional bill of quantities” approach and the outcome could be a disaster**

# NEC4 Box Set

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- **The Guidance Notes now 4 volumes per contract of which two volumes are common to each contract**
  - **Vol 1: Establishing a Procurement and Contract Strategy**
  - **Vol 2: Preparing a contract (ECC,PSC etc)**
  - **Vol 3: Selecting a Supplier**
  - **Vol 4: Managing a contract (ECC, PSC, etc)**

# The end of NEC Jam Session 2





# Next NEC Jam Session **ice-sa**

10 April 2025

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## ECC 4 Core Clauses

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

**Thank you for your  
participation**

**Feedback is welcome**

**[communication@ice-sa.org.za](mailto:communication@ice-sa.org.za)**

**[admin@ecs.co.za](mailto:admin@ecs.co.za)**