

ice-sa **NEC Forum**

Including Jam Session 3

FREE

Thursday 11th April 2024
4 pm – 5:30 pm

Improving SA Infrastructure
using NEC Contracts as intended

SPONSORED BY

 **ENZA**
CONSTRUCTION

HYBRID

NEC training presented by
Mile Sofijanic

ICE accredited NEC Tutor, NECReg
from ICE-SA NEC sub-committee

Supported by: Mbali Mbuli

AGENDA

- ⦿ **Our sponsor, ENZA Construction, will be showcasing its services offered to the construction industry**
- ⦿ **NEC Jam Session 3 - Introduction to the Sections of Core Clauses & Actions in ECC3 Section 1 – General**
- ⦿ **Q & A**

10 NEC Jam Sessions Topics

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Session 1

Introduction to the NEC3 family of contracts; How it came about, what it tries to do and how it is used; Synopsis of each of the 12 contracts in the family.

Session 2

Procurement & contract strategies; Parties and role players; Getting the best out of the NEC contract - change of the culture.

Session 3

Introduction to the sections of Core Clauses & actions in ECC3,
Section 1 – General.

Session 4

Section 2 - *Contractor's* main responsibilities,
Section 3 – Time.

Session 5

Section 4 - Testing & Defects (Quality),
Risk Management.

Session 6

Alignment between contracting Parties,
Diversity and Inclusion.

Session 7

Section 5 - Payment, Cost and the Options,
Section 6 - Change management through compensation.

Session 8

Section 7 - Title,
Section 8 - Liabilities and insurance,
Section 9 - Termination,
Disputes and Adjudication.

Session 9

Pre-award documentation & Developing a contract.

Session 10

NEC3 and NEC4 – the differences.

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 ECC3 (Engineering and Construction Contract)

Introduction to ECS ice-sa

Collaborative Project Strategies©

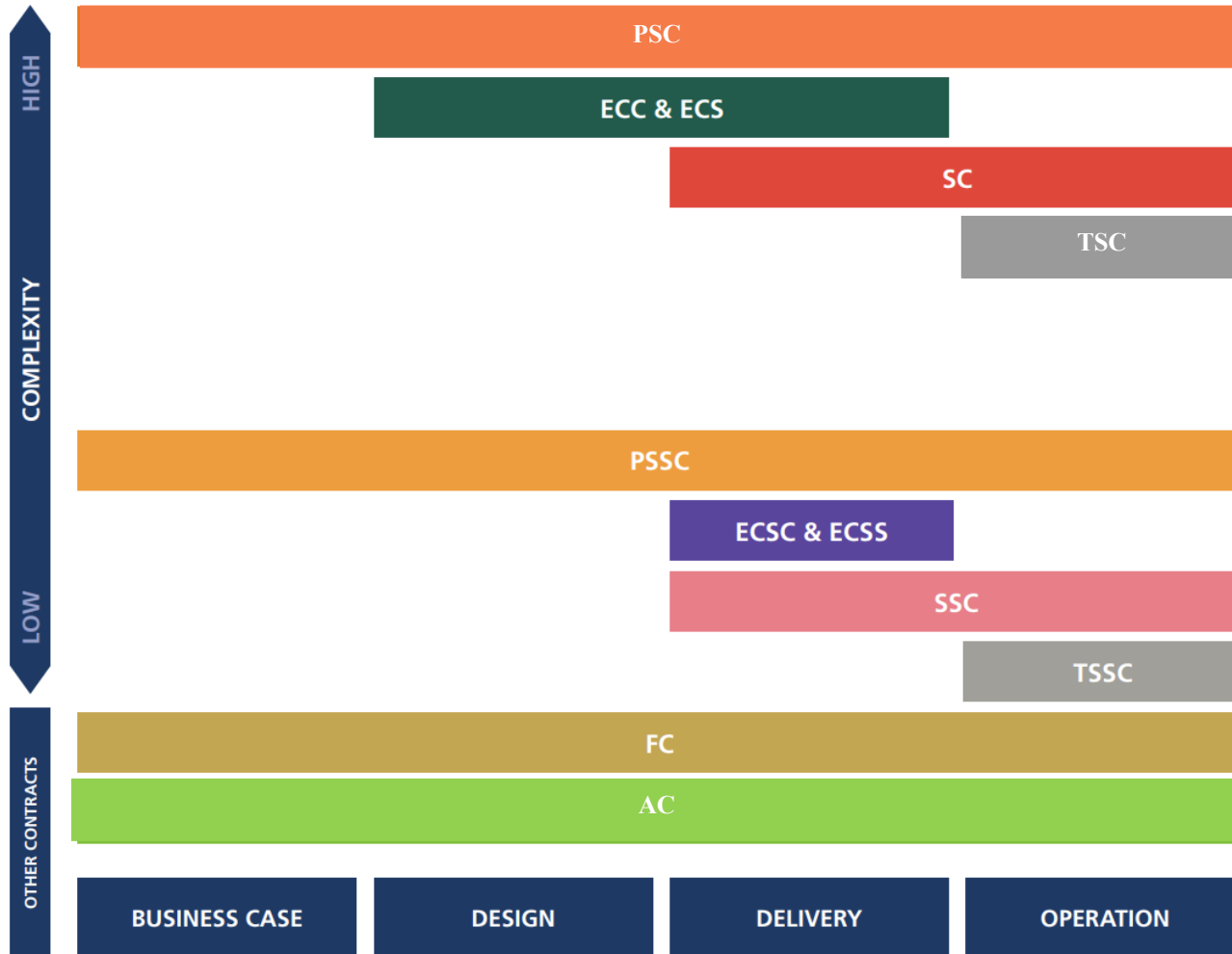
ECS Associates
Empowered Contract and Project Management Services



Reflection on the previous sessions

- **Flexibility**
- **Clarity and simplicity**
- **Stimulus to good management**
 - **The most important objective; every procedure is designed to contribute to rather than detract from the effectiveness for all parties**
 - **foresight applied collaboratively mitigates problems and shrinks risk**
 - **clear division of function and responsibility helps accountability and motivates people**

Contracts in NEC3 family **ice-sa**



Procurement Strategies

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

Contract Strategies

Allocation of risk and incentive

Choosing the right Options

(Main and Secondary Options)

NEC is the route to partnering

Moving industry culture



Traditional
Adversarialism

NEC



Mature
Partnering

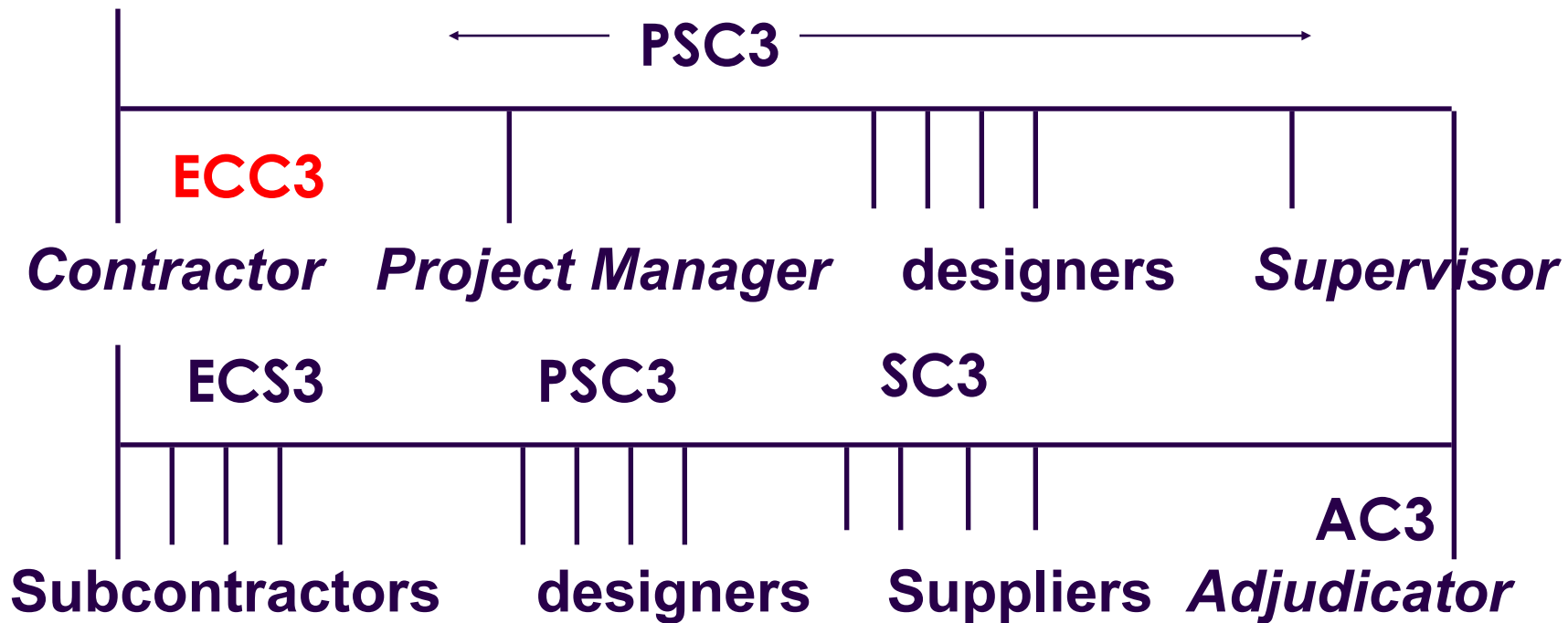
NEC Jam session 3

Introduction to the sections of Core Clauses & actions in ECC3

- **Section 1 – General**

Application of ECC3 ^{ice-sa}

Employer



When to use ECC3

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- **Engineering and construction contracts of any discipline, any complexity, anywhere and any size or duration**
- **For a green field or refurbishment project**
- **Single or multiple main contracts**

Structure of a Contract

- **Core Clauses always apply**
- **Choose one main Option**
- **Select Dispute Resolution Option W1**
 - Except in UK where W2 is used
- **Choose required secondary Options**
- **Contract Data selects *conditions of contract***

Core clauses always apply ^{ice-sa}

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

ECC3 main Options

Choose one of these:

A. Priced contract with Activity Schedule

- total of prices for each activity *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

ECC3 main Options

D. Target contract with Bill of Quantities

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

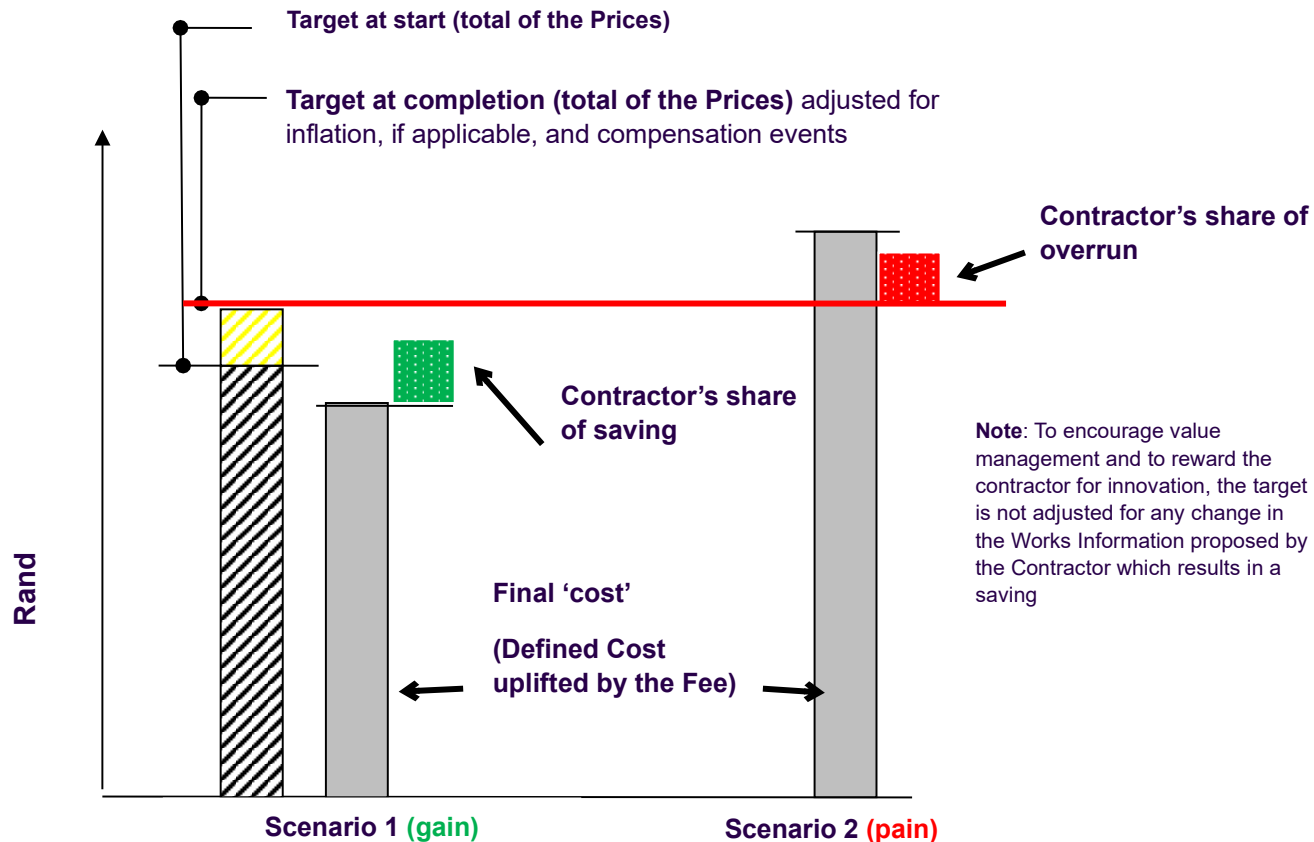
E. Cost reimbursable contract

- Pay Defined Cost plus Fee; forecast total

F. Management Contract

- Pay for Subcontractors & Contractor's Fee for managing them; forecast total

Target cost: Pain & Gain



ice-sa Lessons Learned No.4

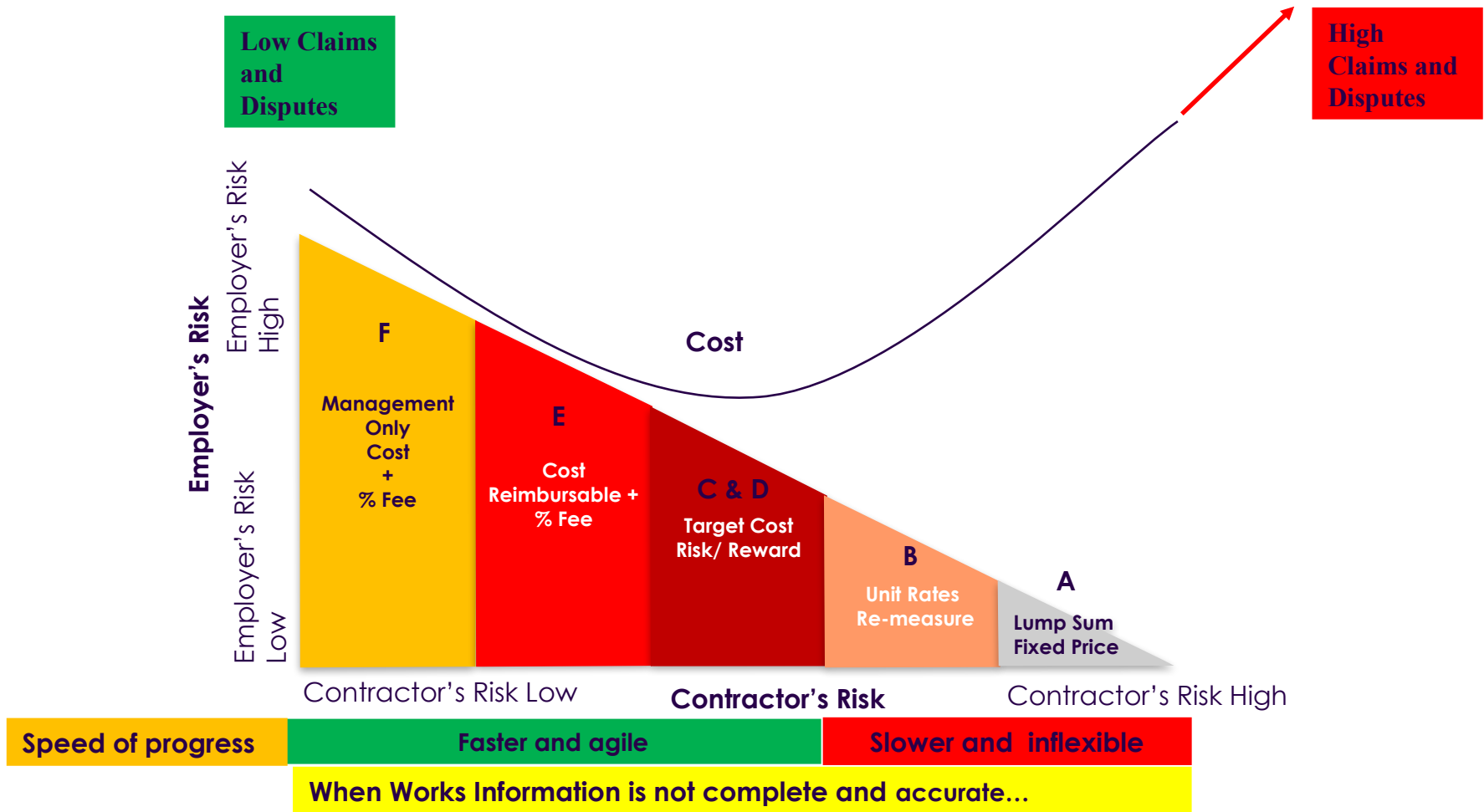


If for every Rand we spend we earn 10 cents and for every Rand we save we earn 20 cents, guess what is our motivation...

Which main option? **ice-sa**

- who does design (copyright etc.)
- extent of definition likely at tender
- design phase time available
- is construction expertise needed to do design
- availability of construction management resources
- Which Party takes more risk?

Project Risks and Types of **ice-sa** Contract



Dispute resolution Options

- **One of two Options must be selected**
 - **W2 only required if contract is subject to the UK's Housing Grants, Construction and Regeneration Act 1996**
- **Always select W1 for use in South Africa**
- **W1 is the NEC Panel's choice but illegal in UK. W2 does not fit NEC philosophy**

ECC3 secondary Options ^{ice-sa}

Select only those required

- X1 Price adjustment for inflation
- X2 Changes in the law
- X3 Multiple currencies
- X4 Parent company guarantee
- X5 Sectional Completion
- X6 Bonus for early Completion
- X7 Delay damages
- X12 Partnering

Secondary options ... **ice-sa**

Select only those required

- X13 Performance bond
- X14 Advanced payment
- X15 Limitation of C's design liability to reasonable skill and care
- X16 Retention (not with F)
- X17 Low performance damages
- X18 Limitation of liability
- X20 Key Performance Indicators
- Z Additional conditions of contract

ECC3 Schedule of Cost Components

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- list of definitions of identifiable components of cost (Defined Cost) for
 - People, Plant & Materials, Equipment and charges in Working Areas
 - manufacturing fabrication and design outside Working Areas
- tendered overhead % applied to cost
- all other 'cost' in *fee percentage*

ECC3 application of SCC

- compensation events in priced options (A&B)
 - whether work subcontracted or not
- assessing main *Contractor's* costs for payment, and valuing change to target in target options (C&D)
- assessing main *Contractor's* costs for payment in cost reimbursable option E
- only used in subcontracts in option F

Section 1

General provisions & main responsibilities

Actions and definitions

10. **The *Employer, Contractor, Project Manager & Supervisor shall* act as stated in this contract and in a spirit of mutual trust and co-operation**

11. **Definitions - also in main option clauses**

***Italicised* term means it is identified in Contract Data**

See next slides for use of *italicised* terms:

Contract Data by *Employer*

- The *conditions of contract* are ...
- The *Employer* is ...
- The *Project Manager* is ...
- The *Supervisor* is ...
- The *period for reply* is ...
- Delay damages for the whole of the *works* are ...

Contract Data by **ice-sa** *Contractor* (his tender)

- The *Contractor* is ...
- The *subcontracted fee percentage* is ...
- The *direct fee percentage* is ...

Some other info in Contract Data:

- Tendered total of the Prices is ...
- The percentage for people overheads is ..
- Percentage for Working Area overheads ..
- Hourly rates for design outside Working Areas

Contract Data is fixed!

- Obligations in the core & option clauses require data in *italics* in Contract Data
- Like Appendix in GCC & FIDIC
- Cannot change Data statement; it is tied to clauses in the contract
- If change is needed, use additional conditions in Option Z or Clause 12.3

11.2(2) Completion, ice-sa

Completion is when *Contractor* has

- **done all the work which the Works Information states he is to do by the Completion Date and**
- **corrected notified Defects which would have prevented the *Employer* from using the *works* & Others from doing their work**

11.2(3) Completion Date,...

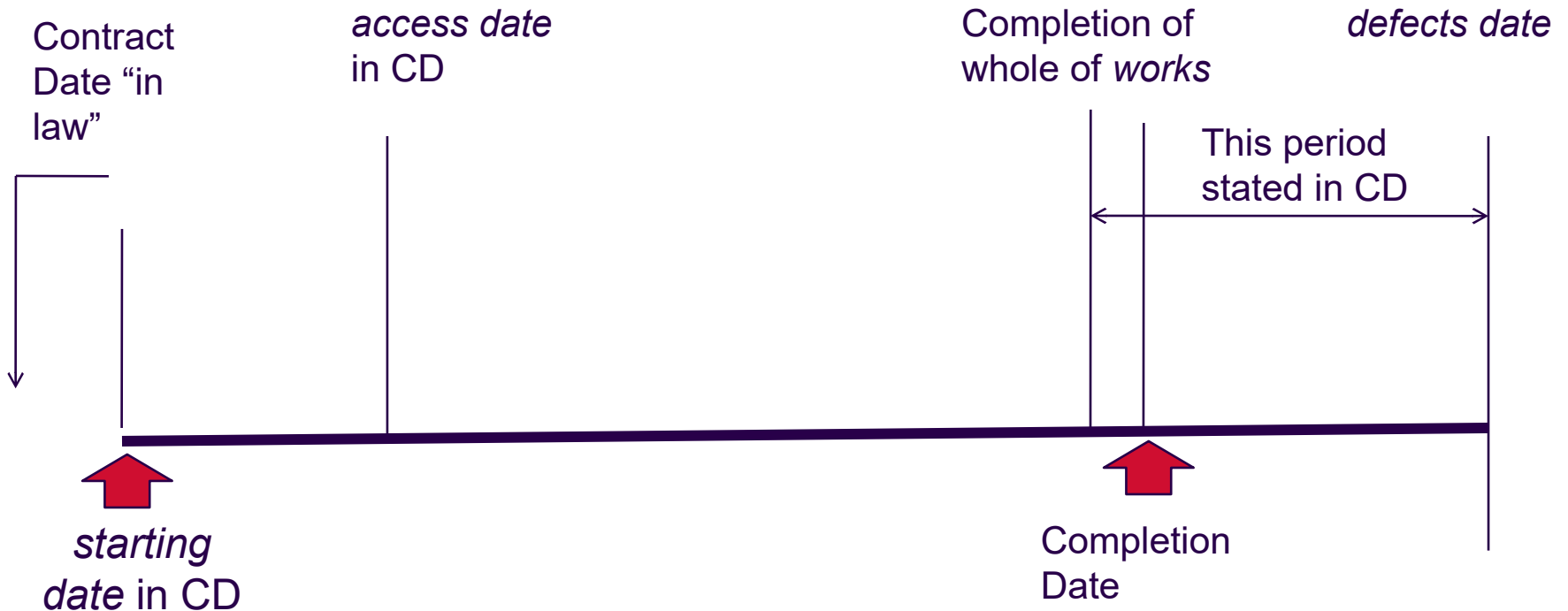
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- is the *completion date*
 - i.e. the date identified in Contract Data
- unless later changed in accordance with this contract
 - extension of time by compensation events only

11.2(4) Contract Date **ice-sa**

- **when the contract comes into existence**
 - depends on how offer and acceptance is effected as governed by jurisdiction
- **not to be confused with *starting date***
 - when time (programme) starts, and
 - when *Contractor* is on risk

Principal dates in ECC3 showing early Completion



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

CD = Contract Data

11.2(12) & (7)

Plant, Materials & Equipment

- **Plant and Materials are items to be included in the works**
 - permanent
- **Equipment: provided and used by the Contractor to Provide the Works**
 - temporary

11.2(13) Provide the Works means....

- to do the work necessary to complete the *works* in accordance with this contract
 - *works* identified in Contract Data
 - *works* may include temporary works
- including all incidental work, services and actions which this contract requires

11.2(15) Site & 11.2(18) Working Areas

- **Site is area within *boundaries of the site***
 - Describe on a drawing
- **Working Areas are those parts of the *working areas* which are**
 - Necessary for Providing the Works
 - Used only for work in this contract

11.2(17) Subcontractor

- has a contract with *Contractor* to construct or install part of the *works*
- provide a necessary service
- supply Plant & Materials wholly or partly designed specifically for the *works*
 - excludes off the shelf supplies

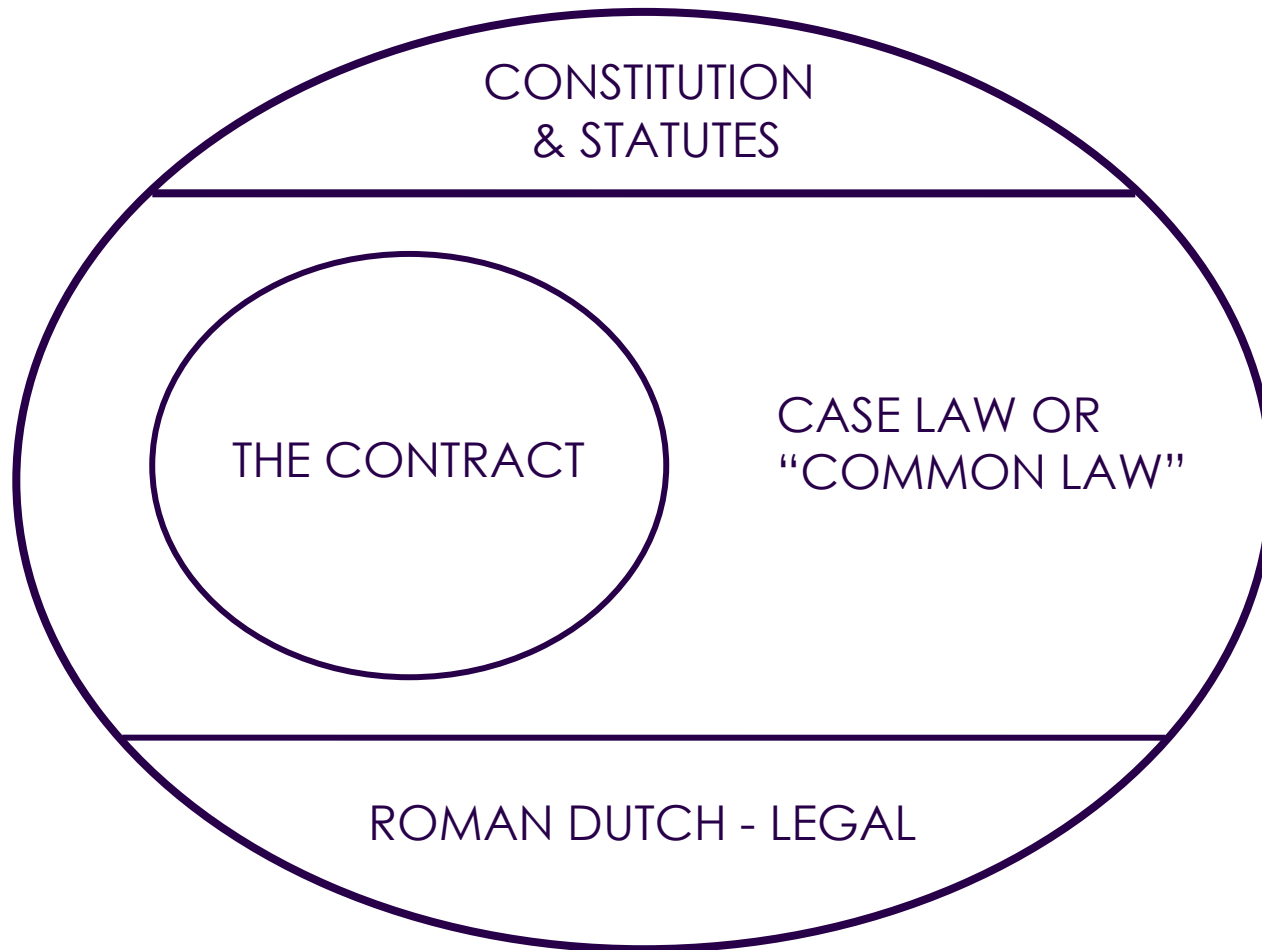
11.2(19) Works Information

- specifies and describes the *works* (i.e.. prescriptive), or
- states any constraints on how the *Contractor Provides the Works* (i.e. compels or restricts)
- in documents listed in **Contract Data**
- in an instruction

12 Interpretation and the law

- Contract governed by the *law of the contract*
- No change unless in writing & signed by the Parties (Shifren clause) – Clause 12.3
- This contract is the entire agreement
 - But not an exclusive remedies contract

Contracts and the law **ice-sa**



13 Communications

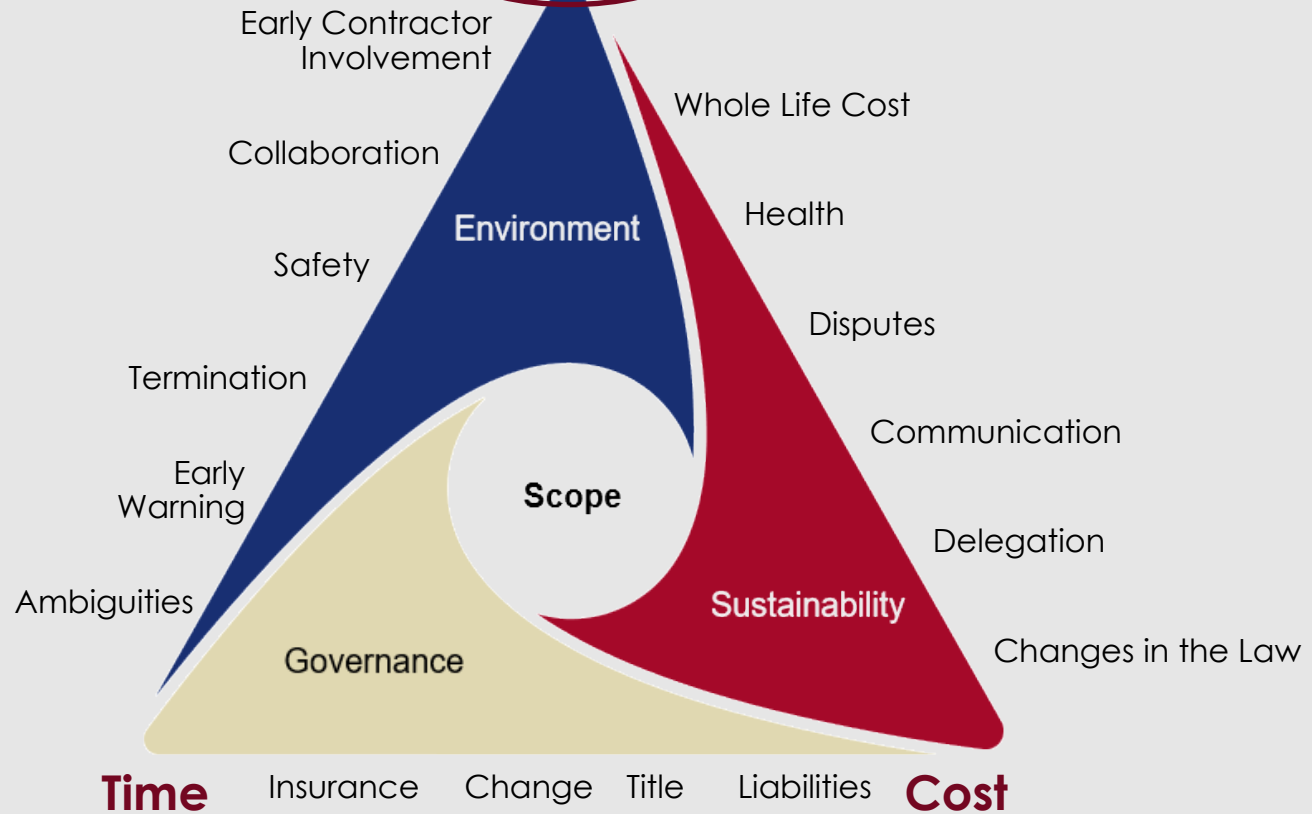
- which can be read, copied and recorded
 - in writing; oral has no validity
 - effective on receipt,
 - respond within *period for reply*.
 - *period for reply* can be extended
- Clause 13.7 each notification to be separate from others

14 *Project Manager & Supervisor*

- *The Project Manager and the Supervisor*
 - acceptance of work does not change the *Contractor's* responsibility
 - may delegate any action
 - may withhold acceptance for any reason. Those not stated are compensation events
- *Only the Project Manager can change Works Information*
- *The Employer may replace the Project Manager and the Supervisor after notifying the Contractor*

the Supervisor

Quality



Roles of the Project Manager and the Supervisor

Project Manager

- Appointed by the *Employer*
- Internal or external to the *Employer's* organisation
- He manages for the *Employer*
- Achieves the *Employer's* objectives
- Has considerable authority
 - “how” he acts defined in the contract
- Restrained by the *Adjudicator*

Supervisor

- Appointed by the *Employer*
- Internal or external to the *Employer's* organisation; better external
- ECC3 defines his actions and decisions – note with care
- His actions & non-actions can be referred to the *Adjudicator*

Design by Employer ... **ice-sa**

- **Designers appointed by the *Employer***
 - **Managed by the *Project Manager***
 - **Are *Employer's* risk for:**
 - timeous information
 - correct information
- **No authority under the ECC contract unless acting as the *Project Manager* or the *Supervisor***
- **Actions on the Accepted Programme**
 - For example delivery of information by stated dates

Lessons Learned No.5



It does not matter who the *Employer* is and how high in the hierarchy, the *Employer's* instruction is not valid under the NEC3 contract unless issued through the *Project Manager* or *Supervisor*...

The *Contractor* should be nice and smile but ask for an instruction before commits an expense for his company.

It is medically impossible, but I met so many people with selective memory and they were still in their young age...

14.2 Delegation

- The *Project Manager* and the *Supervisor* may delegate any actions or cancel delegation
 - after notifying the *Contractor*
- Actions of delegate deemed to be actions of the *Project Manager* or the *Supervisor*

Note who issues instructions

- The *Employer* gives access to Site
- Only the *Project Manager* instructs a change
- The *Project Manager* assesses the amount due
- The *Supervisor* checks quality & final completion
- No reference to QS, Architect, or Engineer

16 Early warning & Risk Register

- The *Contractor* and the *Project Manager* give early warning about price increase, delay, or impaired performance of the *works*;
 - Or even by the *Contractor* regarding one of his risks
- The *Project Manager* enters early warnings in Risk Register
- Either the *Project Manager* or the *Contractor* calls risk reduction meeting
- All seek solutions and the *Project Manager* revise Risk Register

Lessons Learned No.6 ^{ice-sa}



Early warning is not a declaration of a war.

Talk to people and look for solutions.

Be genuine in attempt to mitigate costs.

Make sure that the whole team has the same attitude about early warnings!

17 Ambiguities and precedence

Clause 17

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

19 Prevention

- 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 a compensation event
 - The *Employer* can terminate if prevention continues

The end of NEC Jam Session 3



Next NEC Jam Session

Session 4

- **Section 2 - Contractor's main responsibilities**
- **Section 3 – Time**

**Thank you for your
participation**

Feedback is welcome

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