

ice-sa NEC Forum

Including Jam Session 1

Thursday 8th February 2024
4 pm – 5:30 pm

FREE

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

NEC Jam Session 1

**CPD
Accredited**

**- Presented by
Mile Sofijanic from ICE-SA
NEC sub-committee**

**TOPIC: Introduction to the
NEC3 family of contracts;
Synopsis of each of the 12
contracts in the family.**

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 & 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



Facts and Values

A leading, fully-empowered organisation.
35% black woman owned. BBBEE Level1



3 decades of experience in South Africa and overseas

Delivery of international best practice professional contract and project management services from front end studies to implementation

Business solutions through a combination of expert knowledge and hands on experience

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

Collaborative Project Strategies©
Agile Project Delivery

Our Founder Andrew Baird was a key member of the drafting committee for NEC 1, 2 & 3

Our associate Peter Higgins is chairman of the drafting committee for NEC4

Network based business model – low overhead cost
(current staff 100+, network 1000+)

Integrity

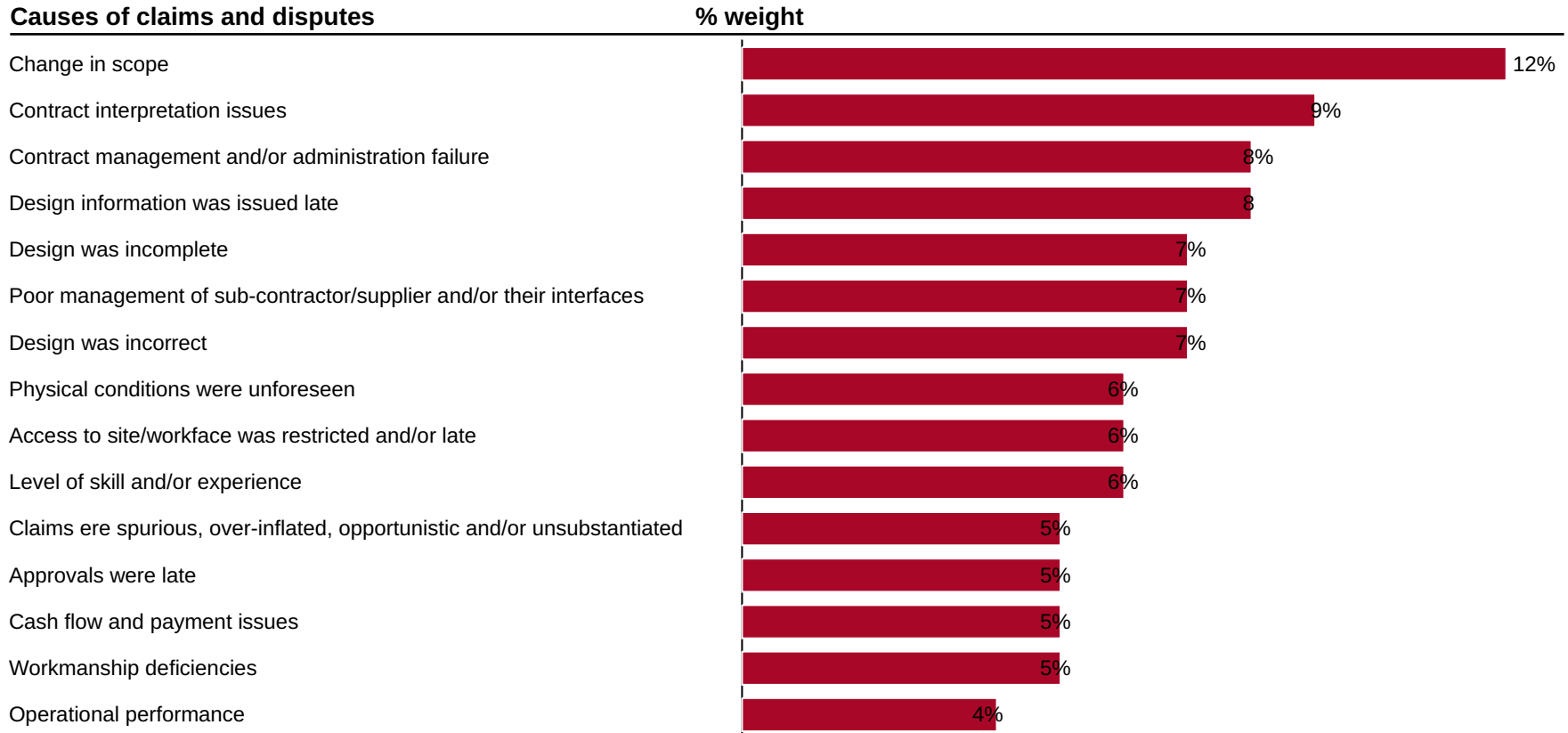
Professionalism

Collaboration

Courage

Why projects fail

Global top causes of claims and disputes for engineering construction projects



When the NEC3 ECC is used as intended, the above problems are reduced

Introduction to the NEC3 system

How NEC came about ice-sa

- Industry approached ICE(UK) to find another way; introduce modern project management into conditions of contract
- 1st contract was called 'New Engineering Contract' (1993)
- Name changed in 1995 to Engineering & Construction Contract with 2nd edition
- "NEC3" now just a brand name for contracts published since June 2005

- **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

Stimulus to good management

- Done by introducing Project Management into contractual relationships; minimum legalese
 - Single point accountability
 - Apply planning and cost management tools
- Forecast not react to events
- Give risk to party best able to *manage* it
- Result: Manage TIME / COST / QUALITY

Lessons Learned No.1



Read, understand and use the contract every day of the project.
“Prevention is better (and cheaper) than cure.”
“A letter a day keeps lawyers away”
A contract “in the bottom draw” is a game of “hit or miss”...

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- **Minimum number of words; everyday English**
- **Clear division of function and responsibility**
- **No provision for nominated subcontractors**
- **Risk allocated in different ways by selection of options**
- **Communications all flow charted with no open ends**
- **Agent acts for employer**

Main drafting principles

- **Early warning of possible change with Risk Register**
- **Always an up to date and realistic programme of work not yet done**
- **Each Party stands by information it provides**
- **Defects only arise from non compliance with information provided**
- **Short payment periods to ease cash flow down the supply chain**

Main drafting principles

- **Change management includes procedures for obtaining a forecast first**
- **Either Party may provide insurance**
- **Modern process of adjudication for dealing with disputes**
- **Full range of options for dealing with inflation, other currencies, incentives etc**

How the system is used

- NEC contracts may be used by anybody who has bought a hard copy or a licence to use electronically
- There are many options within the contracts which can be selected
- The user incorporates the chosen contract and selected options into his working contract by completing Contract Data
 - No need to include published document into a tender or contract

Items of good practice^{ice-sa}

- **Complete scope definition (Works Information in ECC3 and ECSC3)**
- **Good communications**
 - Talk – all in same office- confirm in terms of the contract what has been agreed
- **The right people administering the contract**
- **A well thought out and realistic programme**
 - Can only control that which you have not yet done
 - Forecast time cost & risk

Items of good practice^{ice-sa}

- **Always an up to date assessment of what the final cost and time will be**
 - No surprises; Employer fully informed - good or bad
 - No end of contract re-measure or claims
- **Any others?**
 - Comprehensive Site Information
 - Design for build-ability
 - Early contractor involvement

Lessons Learned No.2



Communicate bad news fast and keep good news until you need it...

Components the NEC3 Project Management system

A 'quick start' overview

Building a (NEC) “house” (ECC3 contract)

- WORKS
- SERVICES
- SUPPLY

(ECC, PSC, SC, TSC, FC, AC)

Short, Subcontract...



Core clauses:

“Foundation, Doors and Windows, Water and Electricity, Walls and Roof”

Add main options: A, B, C, D, E, F and G (PSC only) Add secondary options: X1 – X20
W1 (dispute resolution) Z clauses...



Contract Data plus Works Information
and Site Information

Add schedule of
cost components:



Contracts in NEC family

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- Multi discipline procurement of
- **WORKS:**
 - Civil, Building, M & E, Telecom...
- **SERVICES:**
 - Engineering, Architect, QS, Management Consultant, Term Services by a Contractor...
- **SUPPLY:**
 - Goods procured locally or foreign trade under INCOTERMS.

The NEC3 family of contracts

- Available locally in hard copy in two box sets (www.ecs.co.za)
 - Contracts in one; Guidance notes and Flow Charts in the other
- Available in electronic format
 - ePrint, view and print from PC
 - eCorporate on company intranet
 - Through annual licences from London via www.neccontract.com

The NEC3 works contracts

- **Engineering & Construction Contract (ECC3);**
6 contracts available Options A to F
- **Engineering & Construction Subcontract (ECS3);**
5 contracts available Options A to E
- **Engineering & Construction Short Contract (ECSC3);** 2 contracts lump sum or B of Q
- **Engineering & Construction Short Subcontract (ECSS3);** lump sum or B of Q
- **Published June 2005; minor changes April 2013**

How the short contracts work

- **As an alternative to ECC3**
 - Read alongside ECC3 to see what is missing
 - Usually used for short period works with no interface with other contractors
 - Low risk for both parties
 - Work defined & circumscribed in the contract
- **Price List structured for 2 main options; no secondary options**
- **A complete document including Works Information, Site Information**

The Short Subcontract ... ice-sa

- For use when main contract is under the ECC3 or ECSC3
- Ideal for trade contracts
- Price List can be used for lump sum priced activities or B of Q
- No secondary options

The services contracts^{ice-sa}

- **Professional Services Contract (PSC3)**
 - 4 contracts available Options A, C, E & G
- **Professional Services Short Contract (PSSC3)**
- **Framework Contract (FC3)**
- **Adjudicator's Contract (AC3)**
- **Term Service Contract (TSC3)**
 - 3 contracts available Options A, C & E
- **Term Service Short Contract (TSSC)**

Professional Services Contract

- Appoint professionals to act as *Project Manager, Supervisor*, designers, advisor, Construction Manager QS, architect, management consultant
- Four main Options
 - A: Priced contract with Activity Schedule
 - C: Target contract with Activity Schedule
 - E: Time based contract
 - G: Term contract
 - No option based on value of the project works
- 15 Secondary Options

NEC3 Framework Contract

- Used in early stages of a project to appoint one or more suppliers to carry out construction work or to provide design or advisory services on an as instructed basis
- States how scope will be defined, price will be agreed; what conditions will be used and how works will be carried out
- Switch to other NEC3 contracts as scope becomes better known

Early contractor involvement

- **Bring contractor on board early by process of competitive selection**
- **Assist with finalisation of design and clause 31.2 programme for ECC**
- **Review all design work for constructability**
 - See potential savings
 - Switch from Options A or B to C or D?

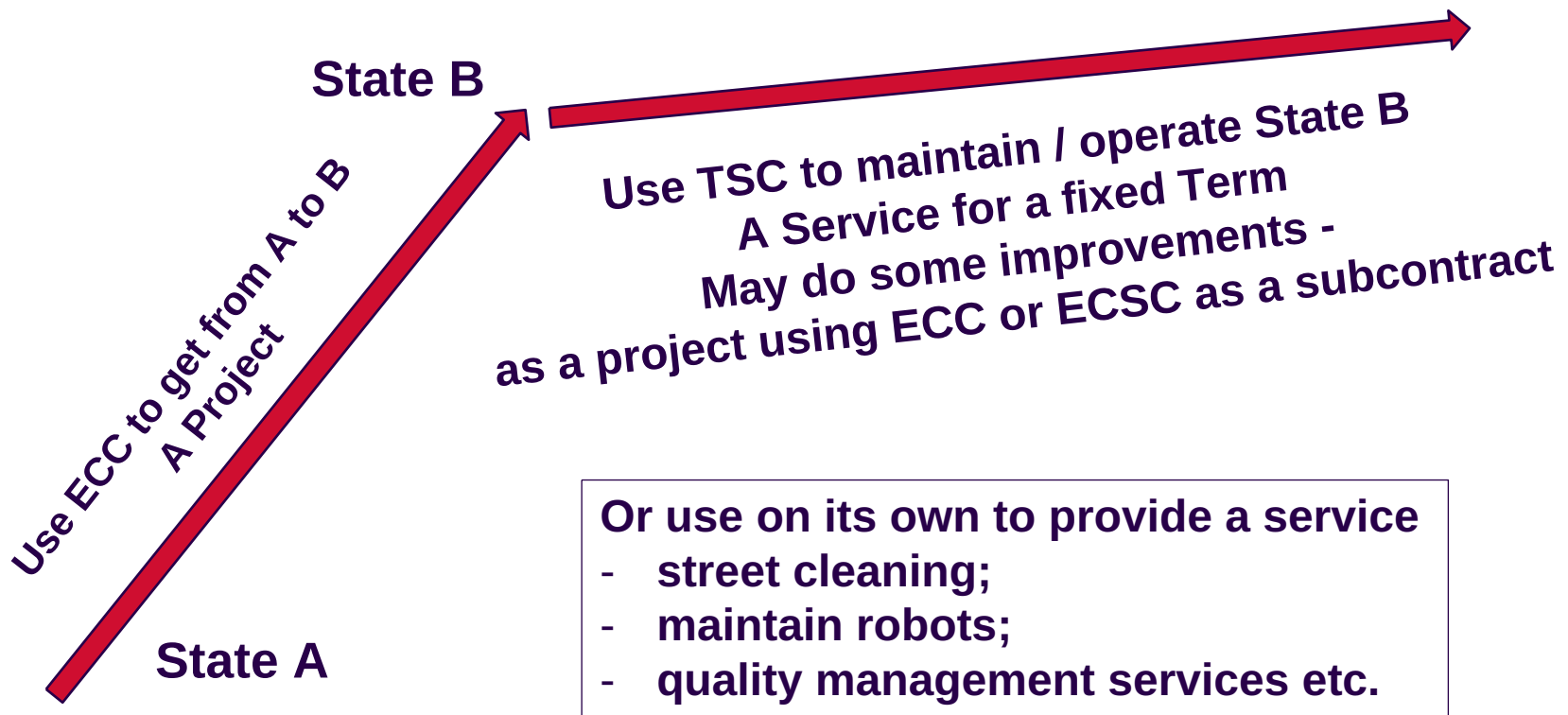
NEC3 Adjudicator's Contract

- Used with all contracts to appoint independent person to decide disputes
- form of agreement used to create a three party contract
- time based payment shared equally by the main Parties irrespective of outcome
- *Adjudicator* not liable for his decision
- can be used independently of NEC

NEC3 Term Services Contract

- To appoint a contractor for operation and / or maintenance of a system (e.g. a Power Station) for a service period
 - Can do projects during maintenance using the other NEC forms as subcontracts
- Provide the service continuously or on a Task by Task call off basis
- Three main Options, A, C and E; 10 secondary Options

Application of ECC and TSC



NEC3 Term Service Short Contract

- **Ideal for services not requiring much management**
 - **Cleaning services**
 - **Routine maintenance of non complex buildings**
 - **Gardening**
 - **Meter reading**
 - **Painting**
 - **Security services**

NEC3 Supply Contract

- This contract should be used for local and international procurement of high value goods and related services including design
- Prices for goods supplied or quantity of goods supplied at stated rate
 - no main Option; 10 secondary Options
- Used with or without Incoterms

NEC3 Supply Short Contract

- This contract should be used for local or international procurement of goods under a single order or on a batch order basis
- Sophisticated management techniques not required
- Ideal for day to day requirements
 - Laboratory requirements
 - Raw materials
 - Pre manufactured materials or plant

Other NEC documents

- **Guidance Notes and Flow Charts for each contract; merged versions for ECC3**
- **“How to” manuals for drafting scope**
- **Other guides & text books**
 - **Managing Reality**
 - **Practical Solutions**
 - **A Users Guide by Jon Broome**
 - **NEC for Facilities Management**
- **See www.neccontract.com**

The end of NEC Jam Session 1



Next NEC Jam Session

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Procurement and Contract Strategies

- How to split project in smaller components if required?
- Who does Engineering, Procurement and Construction?
- Who is managing interfaces?
- Allocation of risk and incentive
- Choosing the right Options (Main and Secondary Options)

**Thank you for your
participation**

Feedback is welcome
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