

The background of the cover features a large, abstract graphic of concentric, overlapping blue circles or arcs that create a sense of motion and depth. The colors range from light sky blue to a deeper cerulean blue.

BRIAN EGGLESTON

**THE NEC4
ENGINEERING
AND CONSTRUCTION
CONTRACT**

A COMMENTARY

WILEY Blackwell

**The NEC4 Engineering and
Construction Contract**

The NEC4 Engineering and Construction Contract

A Commentary

Third Edition

Brian Eggleston[‡]

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Preface

Throughout the fifty year period from 1945 to 1995, the ICE Conditions of Contract provided the standard form for most civil engineering contracts in the UK. But by 1999 when the Seventh Edition of those Conditions was produced it was becoming clear that the New Engineering Contract, first published in consultative form in 1991, was establishing itself as the market leader.

The initial driving force for this change was not so much dissatisfaction with the ICE Conditions; indeed they had served the construction industry well and were respected as being fair, workable and straightforward in their presentation. Disputes which arose between the Parties were mostly settled by decisions of the Engineer, and few progressed to arbitration or the Courts. However, linked to some extent by changes in the 1980s such as privatisation and the growth of project management as a specialised career, and a perception by some that ICE Conditions focused more on the obligations and responsibilities of the Parties than on good management, the Institution of Civil Engineers took the bold step of producing an alternative standard form (the NEC), designed for major works and justifying the appointment of a full-time Project Manager.

When the NEC was first released it was said by the Institution of Civil Engineers that the NEC would provide an alternative to, not a replacement for, the ICE Conditions of Contract. But that promise, if it was such, did not last for long once it became clear that the NEC, after a shaky start, had the support of government ministries, impressed by the recommendations in Sir Michael Latham's 1994 government sponsored report *Constructing the Team*. Thereafter, it was simply a matter of time before publication of the ICE Conditions of Contract ceased and the field was left clear for the NEC to prosper. And there can be little doubt that the NEC has made remarkable progress.

Credit for the momentum of that progress must go principally to the promoters of NEC. No effort has been spared in putting across the message that NEC has special qualities which bring benefits to all users, not the least of those qualities being the NEC's opening requirements of mutual trust and co-operation. Those expressly stated contractual requirements, whether achievable or not, set the NEC forms on a different plane from other standard forms. And although much is made of improved management procedures in the packages covering the new suite of NEC4 contracts, the principal driving force for their ongoing use is likely to be hope or expectation that the projects they apply to will end in cheers rather than in tears.

Author's note

Content

It is not my intention in writing this book to attempt to examine and comment on the full set of sixteen contracts which comprises the NEC4 suite of contracts. I intend, in this book, to do no more than provide a commentary confined to the main contract of the suite, the NEC4 Engineering and Construction Contract (ECC4).

In doing so I will undertake a clause by clause study of the provisions of ECC4. Additionally, I will draw attention to significant changes from the preceding ECC3, and I will consider the implications of such changes. However, as ECC4 has adopted various terminology changes affecting the precise wording of most of its clauses, it would possibly be a distraction to readers for me to include comment on, or to catalogue, all of these. The full detail of these terminological changes, and other changes, can be found in the useful NEC publication *NEC3 and NEC4 Compared* by Robert Gerrard.

In my books on earlier NEC contracts I included, occasionally by reference to potentially applicable case law, comments of a general nature on the provisions of those contracts. Where appropriate, I have repeated those comments, sometimes verbatim, in this book.

Style

NEC4 retains the characteristic of earlier NEC contracts that 'defined terms' have capital initials, and 'identified terms' are in italics.

Text

Very little of the text of ECC4 is quoted in this book. I have assumed that readers will have to hand a copy of NEC4 and other contracts of the suite as appropriate.

Indexing

The published version of the ECC4 Engineering and Construction Contract contains a comprehensive index of subjects referenced to clause numbers. In this book a full table of clause numbers with descriptions is referenced to chapter sections. Accordingly, readers of this book who wish to have the benefit of a subject index will find it a straightforward matter to move from the subjects in the ECC4 contract to the chapter sections in this book.

Chapter 1

Introduction

1.1 Overview

NEC4 is a generic name for a suite of contracts developed by the Institution of Civil Engineers, and published by its wholly owned subsidiary Thomas Telford Ltd. NEC stands for New Engineering Contract, a name originating from the publication in January 1991 of a consultative version of what was then a new approach to the drafting of construction contracts.

1.2 Background

The background to the development of the New Engineering Contract (NEC) does much to explain its style and content. In the 1980s there was ongoing debate within the Institution of Civil Engineers (ICE), the lead body for the production of the ICE Conditions of Contract – at that time the standard form used for most civil engineering works in the UK – as to the direction of future contract strategies. At issue were questions as to whether the then existing standard forms adequately served the best interests of the Parties by focusing on the obligations and responsibilities of the Parties rather than on good management, and whether an entirely new approach was needed to promote co-operation and to reduce confrontation. The prevailing view was that something new was needed, particularly for sizeable contracts where attention to good project management was the key to successful completion.

1.3 Objectives

The drafting team for the first version of the NEC was charged with three specific objectives for the new contract:

- that it should be more flexible in its scope than existing standard forms
- that it should provide greater stimulus to good project management than existing standard forms
- that it should be expressed more simply and clearly than existing forms.

Maintenance of those ambitions has been the bedrock of the 1993, 1995, 2005, 2013 and now 2017 editions of the NEC contracts.

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For the 2017 edition, those ambitions have been expanded:

- to provide even greater stimulus to good management
- to support new approaches to procurement which improve contract management
- to inspire increased use of NEC in new markets and sectors.

1.4 Impacts of change

As evident from the above, it was a matter of policy from the outset that NEC contracts should be different in form and content from other standard forms of construction contracts. And they certainly are.

The early editions of the NEC were greeted with mixed reviews varying from effusive praise to shock and horror. But such a range of reactions was inevitable given the extent to which the NEC differed from traditional standard forms of construction contracts in its procedural and terminological changes, and the extent to which it required changes in attitudes and long-standing practices. Moreover, there were those who recognised that change, however well intended, can bring with it unintended consequences, and that effecting change in the construction industry has never been easy to achieve. For, as Rudyard Kipling wrote a century or so ago in his bricklayer's tale:

*I tell this tale, which is strictly true,
Just by way of convincing you
How very little since things were made
Things have altered in the building trade.*

Not surprisingly, therefore, ambitious expectations that improved contract management and reduction of conflict could be achieved with a contract that was deliberately different from previously used construction contracts have not all been achieved. In particular, moving the focus of the conditions of contract from detailing the obligations and liabilities of the Parties to detailing the particulars of project management seems to have overlooked some of the more obvious consequences of such a change.

It used to be said that a good contract was never taken out of the drawer until it was needed. That axiom, however, has no application to NEC contracts. Such contracts are not simply sets of conditions of contract, they are also manuals of project management and, as such, they should never be taken off the desk, less still put in a drawer.

And one clearly unintended impact of the NEC changes to project management is that the scope for disputes has been greatly increased. Thus, it is now commonplace for pleadings/submissions in respect of formalised disputes arising under NEC contracts to cover differences not only on substantive matters but also administrative/procedural matters. And, not infrequently, the latter types of disputes seem to be the ones that generate most animosity, conflict and lack of trust between the Parties. Some of this arises where the Parties are not equally matched in relation to dealing with the procedural burdens of

their NEC contract, and that imbalance, of itself, generates not only hostility but also more disputes.

There is additionally another unintended factor which surfaces in many NEC adjudications. It can be summarised as disappointment, at various levels within the Parties' management structures, that the NEC requirements for mutual trust and co-operation have not produced the financial and time-related outcomes that were expected. And then the blame games commence.

1.5 The NEC4 suite of contracts

Within the NEC4 Engineering and Construction Contract, hereafter in this book ECC4, there are six Primary Options, which include priced contracts, target cost contracts, a cost reimbursable contract, and a management contract. However, these simply reflect the flexibility of scope of ECC4 itself. They do not count separately as part of the ever-growing suite (or family as it was previously called) of NEC contracts. That suite, with the introduction of NEC4, numbers sixteen separate contracts:

1. Engineering and Construction Contract (ECC)
2. Engineering and Construction Subcontract (ECS)
3. Engineering and Construction Short Contract (ECSC)
4. Engineering and Construction Short Subcontract (ECSS)
5. Professional Service Contract (PSC)
6. Professional Service Subcontract (PSS)
7. Professional Service Short Subcontract (PSSC)
8. Term Service Contract (TSC)
9. Term Service Subcontract (TSS)
10. Term Service Short Contract (TSSC)
11. Supply Contract (SC)
12. Supply Short Contract (SSC)
13. Design Build and Operate Contract (DBO)
14. Alliance Contract (ALC)
15. Framework Contract (FC)
16. Dispute Resolution Service Contract (DRSC).

1.6 Characteristics of NEC contracts

As noted above, NEC contracts are drafted with the objectives of achieving flexibility, stimulus to good project management, clarity and simplicity.

Flexibility is pursued partly by drafting which avoids terminology specific to the practices of particular industries, but principally by providing primary and Secondary Option clauses which allow contracts to be built up by the selection of pricing mechanisms and contractual provisions deemed appropriate for any particular project.

Stimulus to good project management is pursued by the emphasis that NEC contracts place on communications, co-operation, programming and risk management.

Clarity and simplicity objectives are pursued by drafting which is intentionally and conspicuously different from that of other standard forms in style and structure. Short sentences are used, cross-referencing is avoided and so too is technical and legal jargon. And, to assist in understanding and application of the provisions of NEC contracts, User Guides and Flow Charts are available from the publishers. However, the differences of opinion which surfaced when NEC contracts were first published as to whether their drafting achieved clarity and simplicity remain. The charge made by an eminent lawyer of the time that the draftsmen had used 'ladybird language' may have been a little unfair in the light of the NEC's subsequent progress. But, more recently, the comment by His Honour Mr Justice Edwards-Stuart in the case of *Anglian Water Services Ltd v. Laing O'Rourke Utilities Ltd* (2010) that the drafting of an NEC2 contract seemed to represent 'a triumph of form over substance' will probably be recognised by many involved in the use or interpretation of NEC contracts as fair comment.

1.7 Structure of the NEC4 Engineering and Construction Contract (ECC4)

Option and clause structure

In order to create a set of ECC4 conditions for a particular contract, the Client (previously the Employer):

- makes a selection from the six Main Options as to which type of pricing mechanism is to apply
- includes in the contract the nine sections of common Core Clauses, and the Main Option clauses applicable to the selected Main Option (the pricing option)
- specifies which of the three options for resolving and avoiding disputes applies
- selects and includes within the contract which, if any, of the twenty-two Secondary Option clauses are to apply, and
- includes in the contract, under Secondary Option Z, any Additional Conditions of Contract.

The six Main Options of ECC4 are:

- Option A – Priced contract with activity schedule
- Option B – Priced contract with bill of quantities
- Option C – Target contract with activity schedule
- Option D – Target contract with bill of quantities
- Option E – Cost reimbursable contract
- Option F – Management contract.

Each of the Main Options is published in a separate volume which includes the relevant Core Clauses for the particular option. Additionally there is a single volume covering all six options.

The clauses for any particular ECC4 contract are assembled by incorporation of:

- Core Clauses
- Main Option clauses
- Secondary Option clauses.

The Core Clauses are standardised terms, grouped into sections, under nine headings:

- General
- The Contractor's main responsibilities
- Time
- Quality management
- Payment
- Compensation events
- Title
- Liabilities and insurance
- Termination.

The Main Option clauses are, in effect, Core Clauses particular to each of the Main Options, A to F. They are not optional in themselves.

The Secondary Option clauses, which, in ECC4, are prefaced X1–X22, Y (UK) 1–3, and Z, are optional in the sense that to be incorporated into the contract they have to be listed in the Contract Data. However, some of the Secondary Option clauses such as X7 for delay damages and X16 for retention, would be regarded in most construction contracts as essential rather than optional, so care needs to be taken in their selection, and/or omission.

Care also needs to be taken in respect of Options W1, W2, and W3, which relate to resolving and avoiding disputes. These appear in ECC4 between the Core Clauses and the Secondary Option clauses and it is mandatory to select one of these options for inclusion in the contract.

The full list of Secondary Option clauses in ECC4 is:

- | | |
|------------|--|
| Option X1 | – Price adjustment for inflation |
| Option X2 | – Changes in the law |
| Option X3 | – Multiple currencies |
| Option X4 | – Ultimate holding company guarantee |
| Option X5 | – Sectional completion |
| Option X6 | – Bonus for early completion |
| Option X7 | – Delay damages |
| Option X8 | – Undertakings to the Client or Others |
| Option X9 | – Transfer of rights |
| Option X10 | – Information modelling |

Option X11	– Termination by the Client
Option X12	– Multiparty collaboration
Option X13	– Performance bond
Option X14	– Advanced payment to the Contractor
Option X15	– The Contractor’s design
Option X16	– Retention
Option X17	– Low performance damages
Option X18	– Limitation of liability
Option X19	– Not used
Option X20	– Key Performance Indicators
Option X21	– Whole life cost
Option X22	– Early Contractor involvement
Option Y (UK) 1	– Project Bank Account
Option Y (UK) 2	– The Housing Grants, Construction and Regeneration Act 1996
Option Y (UK) 3	– The Contracts (Rights of Third Parties) Act 1999
Option Z	– Additional conditions of contract.

1.8 Changes ECC3 to ECC4

Because the full extent of the changes from ECC3 to ECC4 is extensive and complex, they are identified and considered in Chapter 2 and other parts of this book. But, in summary, the obvious and the important core clause changes are:

1. ECC4 retitles and expands the ECC3 section 4 clauses on ‘Testing and Defects’. In ECC4 the new title of section 4 is ‘Quality Management’ and within that expanded section there are requirements for operation by the Contractor of a quality management system, which incidentally are also passed down to Subcontractors and sub-Subcontractors.
2. ECC4 has new dispute and avoidance procedures which include the involvement of Senior Representatives and the use of Dispute Avoidance Boards.
3. ECC4 requires the Contractor to submit applications for interim payments.
4. ECC4 introduces a set of new provisions on assessment and payment of the final amount due.
5. ECC4 uses a new term ‘the dividing date’ for determining when actual Defined Cost changes to forecast Defined Cost for the purposes of assessments of compensation events.
6. ECC4 renames the ECC3 provisions on risk reduction meetings and risk registers as early warning meetings and early warning registers.
7. ECC4 replaces the ECC3 term ‘risks’ with ‘liabilities’ and retitles section 8 ‘Liabilities and Insurance’.
8. ECC4 defines ‘a Corrupt Act’ and has provisions relating thereto.
9. ECC4 lists two additional compensation events, the first covering the Contractor’s costs when a requested quotation for a proposed instruction is not

accepted, the second covering, as a matter of formality, additional compensation events stated in the Contract Data.

10. ECC4 permits the Contractor, as well as the Project Manager, to propose acceleration to achieve earlier Completion Dates and changes to Key Dates.

However, it should not be taken from the above list that all other changes are insignificant, even if at first sight they may appear so. Thus, the terminological change from 'Works Information' in ECC3 to 'Scope' in ECC4, which runs through the entirety of ECC4, will generally be of no contractual consequence. But in the context of clause 14.3, which in ECC3 empowers the Project Manager to change the 'Works Information' and where the corresponding clause in ECC4 empowers the Project Manager to change the 'Scope', there is evidently room for debate on how far it is wise to depart from the legal principle that words should be given their ordinary meaning. No Contractor of right mind would enter into a contract where the scope of the works (in its ordinary meaning) could be changed at the will of the Client or the Project Manager.

1.9 Review of points of interest

In Chapter 1 (Introduction) of my book on NEC3, I identified under the following headings nine 'points of interest' arising from studies of NEC3 and earlier editions of NEC contracts:

1. Entire Agreement
2. Exclusion of common law rights
3. Conditions precedent to compensation event entitlements
4. Role and powers of the Project Manager
5. Changes to Works Information (now Scope)
6. Prevention
7. Quotations for compensation events
8. Assessment of compensation events
9. Dispute resolution.

All of these will be reviewed in detail in later chapters of this book, but by way of summary, and in the light of the provisions of ECC4, judicial comments on ECC3, and personal experience in ECC3 arbitrations and adjudications, the observations set out in the following sections can be made.

1.10 Entire agreement

ECC4 retains, with a very minor change of wording, the provision introduced in ECC3 at clause 12.4 that the contract is the 'entire agreement between the Parties'. Nothing of note has changed in the meantime, and it remains the case that it is still open to debate as to what is intended by the provision. It may be that it is intended to exclude common law remedies for breach, or it may be

that its purpose is to emphasise that the obligations and liabilities of the Parties are confined strictly to the four corners of the signed contract.

Further comment on this is provided in Chapter 5, but it is worth noting here that arguments about the application of clause 12.4 have surfaced in numerous adjudications under ECC3 contracts where disputes have arisen as to whether certain agreements between the Parties are of contractual effect, and as to the extent to which a distinction is intended between the terms 'entire agreement' as found in clause 12.4 and 'complete contract' as found in the Contract Data Sheet, Part one.

The Parties to ECC4 contracts should, therefore, exercise great caution in reaching what are sometimes called 'supplementary agreements' and would be wise to enter into such agreements only after taking legal advice.

1.11 Exclusion of common law rights

The debate as to whether NEC contracts exclude the Parties' rights to sue for damages for breaches of contract remains unsettled. There is a good case for saying that in main contracts, the intention is that the Contractor's rights are so curtailed by the contractual rights provided in the compensation event procedures of the contract, particularly as one such event is expressed as breach of contract by the Client. That, however, does not dispose of the Client's rights. And when stepped down into the ECC4 subcontract, that same point applies to the Contractor's rights.

1.12 Conditions precedent to compensation event claims

The question as to whether or not, or when, claims, valid on their facts, can be invalidated by failure to comply with time-bars, goes well beyond examination of the time-bars in respect of the compensation events stated in ECC4. It is a question applicable to all types of commercial contracts. More is said on this in Chapter 14.

For all NEC contracts, time-bars in respect of claims have, from the outset, been treated as an integral part of maintaining good project management. However, achieving incorporation into the contracts of workable and legally acceptable provisions has proved a difficult task, as is evident from each new version of the ECC.

ECC4 retains, subject to a minor wording change, the ECC3 requirement for compensation events to be notified within eight weeks (clause 61.3). But, for a possible exception to this rule, see the comments in Chapter 22 on the decision of the Northern Ireland Court of Appeal in the case of *Northern Ireland Housing Executive v. Healthy Buildings (Ireland) Limited*.

1.13 Role and powers of the Project Manager

There was some doubt in the early years of ECC contracts as to whether the Project Manager was to act more as the Employer's agent than as an

independent contract administrator. That point was considered in the 2005 case of *Costain Ltd (Corber)*, where Mr Justice Jackson reasserted the long-standing legal rule that certifiers, including Project Managers, have a duty to act fairly and honestly as between the Parties. The second point was clarified by the inclusion in ECC3 of a new clause 12.3 requiring changes to the contract to be signed by the Parties. That clause remains unchanged in ECC4.

1.14 Changes to Scope (previously Works Information)

ECC4 retains, in clause 14.3, the curiously simplistic statement that the Project Manager may give an instruction which changes the Scope (previously Works Information). Further comment on this is provided in Chapter 6.

1.15 Prevention

Concerns were expressed in many quarters when a set of provisions was introduced in clause 19 of ECC3 defining 'Prevention' in a manner which could be taken as going well beyond 'force majeure' or 'beyond the control of the Parties', and which potentially placed responsibility for all such matters on the Employer. The corresponding ECC4 clause 19 contains some minor changes, but they are unlikely to be sufficient to halt the practice of some Clients of deleting the clause in its entirety. For further comment see Chapter 7.

1.16 Quotations for compensation events

ECC4 retains, with some minor drafting changes, the provisions in clause 62.6 of ECC3 whereby unless the Project Manager responds to the Contractor's quotation for a compensation event within three weeks, it is deemed to be accepted by the Project Manager. The oddity that such quotations can be disputed by the Client and altered by an Adjudicator apparently remains.

1.17 Assessments of compensation events

The basics of the ECC3 clause 63 provisions on assessments of compensation events, including those for division between forecast cost and actual cost are retained in ECC4, albeit with various drafting changes. However, see Chapter 22 for comment on the Northern Ireland High Court judgment in a second *Northern Ireland Housing Executive v. Healthy Buildings Limited* case. Put simply, the Judge held in favour of actual cost assessment over forecast cost assessment in circumstances where actual cost was available at the time the assessment was made, quoting from an earlier case: 'why should I shut my eyes and grope in the dark when the material is available to show what work they actually did and how much it cost them'.

1.18 Dispute avoidance and dispute resolution

For contracts which expressly required the Parties to act in a spirit of mutual trust and co-operation, ECC3 and preceding ECC contracts had surprisingly little to offer by way of non-adversarial dispute avoidance and dispute resolution procedures. ECC4, however, rectifies that with its new, structured approach to such matters.

If properly applied, the new approach should:

1. Reduce the number of disputes going to adjudication
2. Improve on-site and off-site relationships between the Parties
3. Ensure that senior management becomes aware of developing problems – factual, contractual and financial – before they get out of hand.

Should these improvements be achieved, that alone would make production of ECC4 well worthwhile.