Managing Reality

Book One

**Introduction to the Engineering and
Construction Contract**

Third edition

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Book One

Introduction to the Engineering and Construction Contract

Third edition

Bronwyn Mitchell and Barry Trebes

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Preface

In the preface to the first edition of *Managing Reality*, in 2005, we set out our aims and aspirations for ‘managing reality’. These were as follows:

- to add and contribute to the body of knowledge on the use of the NEC Engineering and Construction Contract (ECC)
- to provide a set of books that focuses on the ‘how to’ – how to manage and administer the ECC contract
- to present as a five-part book series that covers both the needs of the student professional or prospective client, through to the novice practitioner and experienced user
- to provide a rounded view of the ECC, whatever your discipline, on both sides of the contractual relationship
- to enable everyone to realise the business benefits from using the NEC suite of contracts generally and the ECC in particular.

Managing Reality does not attempt to give a legal treatise or a blow-by-blow review of each and every clause. It is intended to be complementary to other publications, which give excellent theoretical and legal perspectives.

This book is about dealing with the reality of real life projects: managing reality.

The feedback and support we have received since the first publication of *Managing Reality* in 2005 has been universally positive, and we would like to thank all of you who have bought and used it since its first publication.

We have greatly enjoyed updating and working on this third edition, and we hope that these books continue to provide a useful body of knowledge on the use of the NEC4 ECC.

Bronwyn Mitchell and Barry Trebes
2017

Foreword

A key objective of the first edition of *Managing Reality* was to provide a five-part book series to meet the needs of students, prospective clients, novice practitioners and experienced users. Satisfying such diverse needs is an ambitious objective for any text.

Does *Managing Reality* achieve its stated aim? I believe that the answer to this is a resounding 'yes'. In my view, the calibre of authorship is exceptional. All levels of and types of readership from the uninitiated to the experienced professional will derive considerable benefit from this text. Although written in a very accessible style, there is no skimping on detail or on addressing difficult issues. The worked examples are particularly helpful. *Managing Reality* should be your prime aid from the moment you are considering whether or not to use an NEC contract right through to using and operating the contract.

But *Managing Reality* is much more than simply a 'how to' guide. It seeks to deliver a clear message that NEC contracts cannot be used to their full potential unless one is prepared to ditch one's knowledge and experience of traditional contracting. For example, emphasis is placed on the fact that certainty and predictability are the hallmarks of NEC contracts. Open-ended and subjective phrases and concepts have no place in NEC contracting.

I am privileged to be associated with this third edition of *Managing Reality*. Its publication is very timely since it coincides with the publication of the NEC4 suite of contracts. This new edition of the NEC suite is a reflection of the dominant position that NEC contracts now have both in the UK and in many other countries. It will continue to support those who need help overcoming any reservations about using NEC contracts, and reinforce existing users in their continued use of these ground-breaking contracts.

Professor Rudi Klein
President, NEC Users' Group

Acknowledgements

We would like to thank the following individuals and companies who have supported this book.

For their active participation in this book we would like to thank

- Professor Rudi Klein (SEC Group Chief Executive) for writing the Foreword
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- Michael Fenton, the ICE commissioning editor, for his enthusiasm and patience
- Richard Patterson of Mott MacDonald
- everyone who has given feedback on this book since 2005.

And our continued gratitude to those who provided support and input into the first edition of *Managing Reality*:

- Mike Attridge, of Ellenbrook Consulting, who reviewed this book on behalf of the authors
- David H. Williams, who provided guidance and support in the development of the first edition of this book
- everyone at Needlemans Limited Construction Consultants (now part of the Mott MacDonald Group)
- everyone at MPS Limited with whom Needlemans Limited worked to develop the first web-based management system for the NEC in 2000.

Finally, we would like to thank our family and friends for their ongoing support, understanding and patience.

Series contents

The following outlines the content of the five books in the series.

Book 1 Managing Reality: Introduction to the Engineering and Construction Contract

Chapter 1 Introduction to the Engineering and Construction Contract, concepts and terminology

This chapter looks at

- an introduction to the ECC
- an identification of some of the differences between the ECC and other contracts
- an outline of the key features of the ECC
- conventions of the ECC
- concepts on which the ECC is based
- terminology used in the ECC
- terminology not used in the ECC
- how the ECC affects the way you work.

Chapter 2 Roles in the Engineering and Construction Contract

This chapter describes the roles adopted in the ECC, including

- how to designate a role
- discussion of the roles described in the ECC
- discussion of the project team
- how the ECC affects each of the roles.

Appendix 1 List of duties

Book 2 Managing Reality: Procuring an Engineering and Construction Contract

Chapter 1 Procurement

This chapter looks at the concept of procurement and contracting strategies and discusses

- procurement and contract strategy
- what tender documents to include in an ECC invitation to tender
- how to draft and compile a contract using the ECC
- procurement scenarios that a client could face and how to approach them
- what are framework agreements and how they could incorporate the ECC
- what is partnering and how it can be used with the ECC.

Appendix 1 Assessing tenders

Appendix 2 ECC tender documentation

Chapter 2 Contract Options

This chapter looks at the Contract Options available within the ECC, including

- ECC main and secondary Options
- priced contracts
- target contracts
- cost-reimbursable contracts
- choosing a main Option
- choosing a secondary Option.

Appendix 3 Inspection of the *Contractor's* accounts and records plan

Chapter 3 Completing the Contract Data

This chapter gives guidance on

- how to choose a main Option
- how to choose an Option for resolving and avoiding disputes
- how to choose secondary Options
- choosing optional statements in the Contract Data
- where to position the optional statements in the Contract Data
- how to complete each statement in the Contract Data.

Chapter 4 Scope guidelines

This chapter looks at the Scope and Site Information, including

- Providing the Works
- what should be included in the Scope
- separation of the Scope and the Site Information
- structuring for the Scope
- interface management
- general rules in drafting the Scope
- Site Information.

Appendix 4 Scope clauses

Book 3 Managing Reality: Managing the Contract

Chapter 1 Payment procedures in the Engineering and Construction Contract

This chapter discusses the following

- the payment procedure, including
 - when the *Contractor's* application for payment is submitted
 - when assessments take place
 - when the payment certificate is issued
 - how invoicing is carried out
 - when payment takes place
- the effects of option Y(UK)2, taking into account the Housing Grants, Construction and Regeneration Act 1996 as amended.

Chapter 2 Control of time

This chapter discusses aspects relating to the *Contractor's* programme, including

- the terminology used to describe the programme
- what the programme is
- the definition and purpose of the Accepted Programme
- how and when to submit programmes
- what the programme is used for
- what to include in the programme.

Chapter 3 Control of quality

This chapter discusses:

- The quality framework embedded within the ECC
- The *Contractor's* obligations
- Role of the *Employer's* representatives
- Subcontracting
- Quality control

Chapter 4 Disputes and dispute resolution

This chapter

-
- emphasises the importance of early dispute resolution to the successful outcome of a contract
 - considers the common sources of dispute
 - considers how the ECC has been designed to reduce the incidence of disputes
 - examines how the ECC provides for the resolution of disputes
 - looks at the implications for the dispute resolution process as a result of the HGCR Act as amended
 - looks at ECC changes in relation to adjudication.

Book 4 Managing Reality: Managing Change

Chapter 1 Compensation events

This chapter describes

- the compensation events contained within the ECC
- procedure for administering compensation events
- roles played by the two main parties to the contract in relation to compensation events.

Appendix 1 Compensation event procedure

Chapter 2 Schedule of Cost Components and Short Schedule of Cost Components

This chapter discusses aspects relating to the full SCC and its short version, the SSCC, including

- when the SCC and SSCC are used
- how the SCC and SSCC interact with the payment clauses
- Defined Cost
- the Fee
- the components of cost included under the SCC and SSCC
- Contract Data part two.

Appendix 2 Example quotations for compensation events

Appendix 3 Example people cost calculations

Appendix 4 Comparison between traditional preliminaries build-up and how they relate to the Schedule of Cost Components and the Short Schedule of Cost Components

Appendix 5 Interrelationship between the *Contractor's* and the *Subcontractor's share* on target cost contracts

Book 5 Managing Reality: Managing Procedures

Chapter 1 ECC Management: Procedures

This chapter brings together all the aspects discussed in previous chapters in Books One to Four of the *Managing Reality* series. This chapter provides the 'how to' part of the series. It introduces some example pro formas for use with the ECC. Unless detailed separately due to a complex procedure, replies are described under the relevant action.

For quick reference, this chapter may be read on its own. It does not, however, detail the reasons for carrying out the actions, or the clause numbers that should be referred to in order to verify the actions in accordance with the contract. These are described in detail in the other books that form part of this series.