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## Book review

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## Book review

### Managing Reality (third edition)

B. Mitchell and B. Trebes. ICE Publishing, London, UK, 2018,  
ISBN 978-0-7277-6195-8, £175.00, 704 pp.

Now in its third edition, *Managing Reality* is a five-part book series that provides a balanced view on how to use the *Engineering and Construction Contract* (ECC), a key component of the fourth edition of the *New Engineering Contract* (NEC4) suite. One overarching perception of the authors is that contract guidelines often provide soft generic directions, whereas, as projects evolve, situations often arise that require hard decisions from multiple dimensions to contract scenarios. The knowledge gap in this is quite important. Without a clear understanding of the intent of contracts, projects may fail due to disconnections between realities and the applications of contract language in varying project circumstances. Stakeholders who interpret contracts only through their own subjective lenses may misplace the theoretical contexts of aspects of contract guidelines unintentionally, particularly when faced with unique challenges. Results that will emanate from this are better imagined than experienced: positive energies and humongous resources will dissipate through disputes and dysfunctional relationships. Project outcomes will also suffer unnecessarily.

A major achievement of the book series is that the authors have laboured exceptionally to simplify the specialised language in which the ECC is worded in such a way that novice practitioners and experienced users are able to understand and apply the ECC appropriately irrespective of the contract side they belong. In particular, the authors provide very clear guidelines on how to make the best of certainty and objectivity that NEC suites offer. This is a significant contribution to scholarship on the subject of project management and contract management.

*Introduction to the Engineering and Engineering Contract* (book one) provides an excellent introduction of the ECC. The authors are as clear as glass on their simplified explanations of concepts, terminologies and key features of the ECC. Their description of the roles of project teams in ECC is an unusual attention winner. There is now some characterisation of integration and collaboration in an engineering contract! This indispensable attribute never had a place in traditional contract constructs. With the achievements of NEC suites and the authors of this book series, there is an understanding that stakeholders now have an unequivocal chance to drive project success by leveraging on the capabilities of autonomous technologies that thrive mainly on collaboration and integration. This makes NEC4 and the ECC a worthy leader of its time, a key which unlocks the future that has truly begun.

The reviewers found the two chapters in book one a joy to read. Early sections of the book present essential components of the ECC and several key distinctions between the ECC and traditional contracts. The authors carefully explain the unique terminologies of the ECC and show greater care on how these are different from other or similar terminologies used in traditional contracts. Figures and flow charts used to present these are beautiful and easy to follow. Methods of work in projects are another key element of the first part of book one. The reviewers also found these a good read. The second part of book one explains role descriptions of various participants in the project team. In particular, the division of functions and responsibilities of members of the project team, and the relationships between the various roles were made very clear. In addition, the book illuminates the position of the ECC on the formation of a project team and the implications of the ECC to each discipline within the team.

The authors were exceptionally concise and precise in their explanations. Readers will not struggle to understand them. However, readers would benefit more if the explanations provided on each of the clauses within the contract were not too brief. It is true that the intention of the authors is not to provide a blow-by-blow review of each clause. Nevertheless, when a book reads so well, a reader's appetite becomes wet enough to desire to acquire even more knowledge. Perhaps a future edition will consider this suggestion. In addition, a third chapter could become necessary in the future to further clarify the link between the roles and responsibilities assigned to project teams and various ECC clauses that provide the frameworks on how teams operate in exceptional circumstances. This could mean an extension to the appendix to provide further clarity on designated duties of project team members in unique projects.

*Procuring an Engineering and Construction Contract* (book two) explains some basic principles of procurement methods outlined in the ECC. Elements of these include how to undertake invitation to tender and tender evaluations, completion techniques for contract data and how to draft comprehensive specification of work scope. The practical illustrations made in this book will assist established and early-career contractors and professionals on NEC suites' perspectives on ECC procurement methodology.

The reviewers found the four chapters of the book seamless. Chapter 1 covers procurement concepts and contracting strategies that are most popular in ECC. In particular, readers will find helpful information about procurement strategies and several parameters that influence them. There are useful information about the essentials of efficient contract documentation, how to deal with nuanced procurement scenarios that could confront project owners as well as how to make the best of agreement frameworks recommended in the ECC suite. Chapter 2 of book two explains contract options within the purview of the ECC. The reviewers found tremendous information in the authors' presentation of the six main option clauses and the 21 secondary option clauses that define contract terms and conditions in the ECC. Most readers will find this helpful also – not only this, but also the explanations provided by the authors on priced, target and reimbursable contracts in this chapter. Chapter 3 expands on Chapter 2 further. It explains how payment mechanisms and dispute resolution may shape cashflow and project outcomes in different contract options. Another remarkable attribute found in book two is how the authors present a systematic process for choosing secondary options that help in shaping contract strategies and the discussion on how contractors and clients should complete the contract data document. Chapter 4 identifies clauses within conditions of contract that help shape the scope definition. The chapter also discusses the ECC's standpoint on the making of an appropriate construction site, new and retrofits in like manner, including service mains and inspection access, and how these integrate in the ECC.

Book two is an impeccable guide for construction professionals who are keen to have some authentic understanding of procurement processes under the ECC. The authors' writing style reinforces the ethos of the ECC in that they use plain language to enhance the certainty and clarity of the ECC and emphasise the importance of unambiguous communication among contract parties. Contractors, owners and construction professionals will find help on these, particularly on the preparation of contracts with the appropriate scope definition as well as preparation of site information to a sufficient level of detail. The reviewers have noted that certain examples could be developed further; perhaps, the authors

were mindful of space and their style of precise writing. Examples on how to complete the contract data (Chapter 3) and a demonstration of parts filled by the client and contractors would have made book two easier for readers to realise the requirements expected of them accordingly.

*Managing the Contract* (book three) provides a practical commentary on the realities of managing contracts under the ECC. The book maintains its weight in clarity and cautions contract parties on how to consider circumstances that are relevant to them while considering uncertain or complex issues that could arise during the execution of specific clauses. It is interesting to read about precautions around procedural clauses to help avoid confusions and conflicts in users' interpretations of the ECC. The reviewers found that the authors pay very careful attention to the roles and powers of the project manager and the crucial roles of the client in decision-making in ways that suit the client's own organisational structure and procedures, as well as projects' strategic requirements.

There are four chapters in book three. Chapter 1 provides an extensive detail on payment mechanism. The chapter covers the procedures in various steps involved between the development of contractor's proposal for payments due and the client's ratification processes and eventual payment. A unique success of the chapter is the discussion on specific impacts of statutory regulations on payment mechanism and procedures. Chapter 2 covers the efficacy of the contractor's programme of project execution. Chapter 3 presents contractor's quality control obligations while Chapter 4 emphasises the roles of disputes and the importance of their early resolution. The reviewers recommend that further development on this would help readers. Readers need to read more examples of dispute causations relating to each clause and some in-depth practical explanations of outcomes from resolution processes as well as what these might imply to the user's strategic applications of the ECC – perhaps a considerable idea for another book.

*Managing Change* (book four) focuses on the evolution of change events and how they are managed under the ECC. There are two chapters in the book. Chapter 1 discusses compensation events for which contractors are entitled to compensation in terms of cost and time. The reviewers found that unlike traditional contracts, the ECC does not treat contractors' claims for additional costs and claims for extension of time separately. The reviewers also found that the authors did a beautiful job in how they explained the premium placed on collaboration by the ECC and how this encourages contractors to document options for addressing change requirements and helps project managers on how to select options that best suit project objectives. Main compensation events, 21 of them, as well as optional compensation events, were explained in detail in the book. Readers will also find help in the authors' explanations on the procedures to be followed by project managers and contractors under various circumstances of change events. Chapter 2 covers schedule of cost components (SCC) and the short schedule of cost components (SSCC), an area the authors claim that has caused users of NEC3 suite a great deal of confusion. With care, the authors explain how NEC4 suites differ in approach from traditional contracts regarding the pricing of contractual and non-contractual changes during the course of a contract.

The authors argue that NEC4 suites recognise that the cost of change to contractors during the construction phase can be higher or lower than precontract estimates. The reviewers agree with the authors that it is not in the best interests of either party to suffer unduly because of change events and their impacts on costs. As simple as this principle is, it is a fact well betrayed by regular events and research reports on the industry. The reviewers recognise that this as an important debate in project management literature in that some authors will rather seek to blame change causation for overruns than to consider change as a delimiter of projects' authentic success. For example, compare Flyberg's 'Over budget, over time, over and over again: managing major projects' in *The Oxford Handbook of Project Management* (2011) and *Introduction: The Iron Law of Megaproject Management* (2016) and Love *et al.*'s 'Understanding the landscape of overruns in transport infrastructure projects' (2015) and 'Error management: implications for construction' (2016). SCC and the SSCC are the means by which NEC4 deals with this problem. The authors describe each of the components of cost to be included in the SCC. Worked examples and detailed explanations provided in this chapter will assist readers in understanding the applications of SCC in determining the cost of a compensation event. The reviewers consider this as an important contribution to scholarship on this very important subject.

*Managing Procedures* (book five) ties together the first four of the five book series in just one chapter. The book takes a step beyond stating what could be done under the ECC. It explains how to achieve stipulated outcomes. One perspective of the authors, which was considered inspiring, is the fact that simplicity and clarity in the use of language in contract documentation does not lessen the complexity and uncertainty in projects significantly. An absolute truth in this is that achieving project success is much beyond simplifying contract guidelines. The authors make this clear abundantly. They conclude that every user of the guidelines in the NEC suites, and the books that explain them, must brace up for the challenges that project reality is likely to throw at them. This depends on how users interpret their roles adaptively and how they dedicate themselves towards achieving projects' best benefits by sharing risks and opportunities jointly with care among contract parties.

Overall, the books offer a useful guide and an interesting read to novice and established users alike. The reviewers are confident that users will be able to draw useful insights from the examples presented throughout the book series. The plain language and clarity of the authors will inspire the future development of literature in the subject areas covered in the books. Researchers and developers of other contract guidelines will also draw strengths from the explanations provided by the authors of these book series and produce much-improved studies and guidelines – particularly in the areas of collaboration and integrative autonomous technologies.

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