

Editorial

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This issue consists of three briefing articles, three full-length papers, and one book review, which present professional insights on and research into a range of topics, including productivity and safety improvement through the use of building information modelling (BIM) (Teo, 2016); obligations in NEC contracts (Davis and Thurlow, 2016); public–private partnership (PPP) in Gulf Cooperation Council (GCC) countries (Dalley and Barton, 2016) and for future urban infrastructure (Alim and Polak, 2016); the effects of an economic downturn on construction partnering (Challender *et al.*, 2016); the chronographic protocol for modelling construction projects (Francis, 2016); and managing diversity in multicultural projects (Smith, 2016). A brief introduction about these papers is given below with regard to their contributions to the body of professional knowledge in related areas.

The briefing article written by Teo (2016), from the Department of Building at the National University of Singapore, focuses on determining productivity and safety indices using BIM. Based on current practice in productivity and safety management in Singapore, this article describes a research project funded by the Singapore Ministry of Manpower (MOM) into BIM integrated productivity and safety assessment. The research was to incorporate BIM technology into the implementation of the Buildable Design Appraisal System led by the Building and Construction Authority and the Construction Safety Audit Scoring System led by the MOM in Singapore. The outcome from this research project is also described with an illustration about the conceptual framework of its proposed Intelligent Productivity and Safety System. With regard to the wide adoption of BIM in construction projects across the world, this briefing article provides timely information about how BIM can be theoretically integrated with productivity and safety measurement at pre-construction stage. This article also provides useful references to productivity and safety measurement in Singapore.

The briefing article written by Davis and Thurlow (2016), at LindsayKeller and independently in Johannesburg, South Africa, respectively, highlights the important issue of good faith obligations in NEC and the use of core clause 10.1 in the NEC Engineering and Construction Contract. It provides an analytical interpretation of core clause 10.1 with regard to reliable contractual partnership or legal relationship being set upon mutual trust between two parties. The paper discusses the duties of a quasi trustee, and emphasises the principle that a party, as quasi trustee, cannot benefit from his own breach of contract. The paper makes it clear that good faith obligations for good project management are not a matter of each party pursuing his own self-interest without regard to the other parties' interests,

and this encourages parties to develop good faith obligations in their NEC contracts in project management practice.

The briefing article written by Dalley and Barton (2016) at Dentons in Abu Dhabi, UAE provides an overview on the current practice and trend of PPP in major projects in GCC countries. With regard to the newly introduced legal framework for PPP in Dubai, the article describes the current structure and financing of major projects, and the objectives and form of the new PPP law. In addition, it describes the current status and future trend of adopting PPP in other GCC countries including Kuwait, Oman and Qatar. Based on these descriptions, the article highlights key issues such as risk allocation and bankability for parties undertaking PPP projects in GCC counties, and future prospects for PPP projects in the rail and renewable energy sector.

The full-length paper written by Alim and Polak (2016), from CH2M Hill Inc., USA and Imperial College London in UK, respectively, focuses on PPP for financing of future urban infrastructure in an international perspective. Based on the background of constraints on public funding of infrastructure, financing mechanisms and funding sources, lessons learned from past failures of PPP and issues of future infrastructure relevant to PPP delivery, the paper provides thorough discussions on major issues relating to PPP in infrastructure delivery and a proposed approach with regard to early assessment and strategy for risk sharing, customising project delivery strategy for PPP projects and the structure of the PPP entity. The paper puts forward a more proactive and effective approach for the public sector to adopting PPP in infrastructure projects and provides topics for further research. This paper provides technical insights for theoretical research and practical development towards better practice on project financing for urban infrastructure development.

The full-length paper written by Challender *et al.* (2016) describes research into the effects of an economic downturn on construction partnering, based on interviews carried out with senior industry professionals in the UK. The research described in the paper was conducted through semi-structured in-depth interviews with eight construction professionals from different construction industry disciplines. The interviews provided 30 main observations within six qualitative themes, which include importance and reliance on trust; factors that instil trust; importance and influence of hard and soft factors; best practice; potential barriers; and improvement measures. The paper provides discussions on research findings in terms of challenging the philosophy of collaboration, austerity in practice, trust within the austere context and the effects of austerity on collaborative procurement. Findings from this exploratory research can well inform further research and practice.

Francis (2016), at Quebec University in Canada, provides a full-length paper about a chronographic protocol for modelling construction projects. This is based on the latest development from the author's long-term research into a chronographical approach to graphical modelling on construction operations, their processes and their logical constraints towards clear and effective information communication in construction projects. Based on an extensive literature review on graphical modelling for project management, this paper describes the new conceptual framework of a chronographic standard protocol for planning and monitoring on operations, processes and resources in construction projects, and key technical details about defining physical entities (work, resources and locations) supporting the standard protocol, organising the project information, approaches to project plan modelling, setting up schedule logic and developing processes. The paper also provides discussions on current progress on the validation of this chronographic standard protocol with regard to potential adoption of this protocol to support decision making in construction project management.

Smith (2016) provides a review of Zein's book entitled *Culture and Project Management – Managing Diversity in Multicultural Projects* (Zein, 2015). It provides a thorough review of both the background and contents of the book with regard to its relevance to managing diversity in multicultural projects from both academic and professional perspectives, and makes a recommendation on the use of this book in project management practice.

The editorial team hopes you find these papers informative and stimulating, and would be pleased to receive comments on this issue. Thank you.

REFERENCES

- Alim S and Polak J (2016) Public–private partnerships for future urban infrastructure. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **169(4)**: 150–158, <http://dx.doi.org/jmapl.16.00001>.
- Challender J, Farrell P and Sherratt F (2016) Effects of an economic downturn on construction partnering. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **169(4)**: 159–167, <http://dx.doi.org/jmapl.15.00033>.
- Dalley I and Barton N (2016) Briefing: Public–private partnerships in the GCC: a changing landscape. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **169(4)**: 147–149, <http://dx.doi.org/jmapl.16.00005>.
- Davis T and Thurlow PN (2016) Briefing: Good faith obligations in NEC contracts. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **169(4)**: 145–146, <http://dx.doi.org/jmapl.16.00004>.
- Francis A (2016) A chronographic protocol for modelling construction projects. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **169(4)**: 168–177, <http://dx.doi.org/jmapl.15.00039>.
- Smith S (2016) Book review. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **169(4)**: 178, <http://dx.doi.org/jmapl.15.00052>.
- Teo EAL (2016) Briefing: Determining productivity and safety indices using BIM. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **169(4)**: 143–144, <http://dx.doi.org/jmapl.15.00054>.
- Zein O (2015) *Culture and Project Management – Managing Diversity in Multicultural Projects*. Gower, Farnham, UK.