Editorial

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The construction industry is responsible for producing the most complex of products that mankind has developed, the buildings and the infrastructure that represent the built environment that we live in. Procuring and managing the buildings and infrastructure we produce is therefore inherently complicated and resource intensive. Over the years, construction industries the world over have developed complex solutions for procuring their products that involve multi-source supply chains procuring and integrating to develop the buildings and structures we need. *Management, Procurement and Law* focuses on the aspects of procuring buildings, structures and infrastructure, managing the processes and production, and issues related to the legal environment within which procurement occurs.

The global construction market is forecast to grow by over 70% by 2025 (GCP and OE, 2013). This only means that the need for research in developing solutions for procurement, management and legal aspects in the built environment is ever increasing. This issue provides an insight into several aspects of procurement, law, management and educational aspects related to these fields of study.

The issue begins with a brief practice note from Gan (2015) that dips in to one of the most common types of cost allocations in projects, provisional sums (PS). These are important and are often governed by conditions of contract and other standards such as NRM2 (RICS, 2012). It defines PS as a sum of money set aside to carry out work that cannot be described and given in quantified items in accordance with the tabulated rules of measurement. Essentially these represent sums of money allocated for work not clearly defined or designed. Measurement and valuation of such sums often result in variations, ambiguities and disputes. Gan (2015) in this practice note provides an overview of how PS are dealt with in the Fidic Yellow Book (Fidic, 1999). It provides an analysis of contractual issues to valuation and payment providing a case study to demonstrate the application.

The issue then focuses on one of the main innovations in procurement: public–private partnerships (PPP). PPP forms of procurement are recognised as an effective way of delivering value for money in public infrastructure development or service delivery (Babatunde *et al.*, 2014). It seeks to combine the advantages of competitive tendering and flexible negotiation, and to allocate and share risks on an agreed basis between the public and private sectors (Li *et al.*, 2005). It provides a vehicle for sustaining development, providing means of financing that draw the private sector into the development effort of the public sector at large. Costantino and Pellegrino (2015) provide a cross-case analysis of the implementation of PPP in both developing and developed countries, looking at 33 case studies. They

analyse three of the most important aspects characterising a PPP transaction: the risk transfer to the private partner, the use of private financing and the use of private expertise and management skills, very much in keeping with the theme of the journal. They conclude that both developing and developed countries have almost the same behaviour in terms of risk transfer to the private party and use of private expertise and management skills in PPP projects. However, they have observed different behaviour in the level of use of private financing, with developed countries displaying significantly greater use than the developing countries.

Olayinka *et al.* (2015), in the next paper of the issue, explore the impact of knowledge management (KM) on the cost of poor quality in construction projects. KM is the process of capturing, developing, sharing and effectively using organisational knowledge (Davenport, 1994). In modern construction enterprises KM occurs as a multidisciplinary process where architects, quantity surveyors, engineers, contractors, subcontractors, suppliers and other stakeholders interact in achieving organisational objectives by making the best use of knowledge. Olayinka *et al.* (2015) analysed the views of 25 industry experts – representing large construction organisations – involved in formulating and implementing KM strategies to identify the impact of KM on reducing cost of poor quality. They conclude that while there is a positive impact from KM there is lack of optimisation to reduce the cost of poor quality. This was due to barriers such as the lack of performance metrics, time and budget constraints. The study provides a useful insight in to optimising and managing knowledge within construction organisations with a view to reducing the cost of poor quality in construction projects.

The third main paper of the issue focuses on the vital aspect of engineering education. Murray *et al.* (2015) provide an insight into aspects of mentoring undergraduate civil engineering students and its impact on the student mentees in developing their professional career. While the benefits of industrial placement are widely acknowledged (Lee *et al.*, 2013) there is often a shortage of placement opportunities for engineering graduates embarking on a professional career in civil engineering. The shortage is acute in periods of industrial recession, as was experienced in the UK in the last period of great recession, 2008–2012. The role of industry mentors becomes very useful in such periods to fill the gap created by the shortages. The study explores 345 civil and environmental engineering student mentees, 83 graduate mentors and 31 employers in providing a well-organised and monitored process of industrial mentoring. The results indicate that the mentees highly value the opportunity and access to mentors, while the whole process was found to make behavioural and attitudinal changes regarding the mentors' own continued professional development.

The final item in this issue provides a discussion (Laryea *et al.*, 2015) on the use of innovative construction procurement at Wits University by Laryea and Watermeyer (2014). The discussion attempts to illustrate the use of NEC forms of contract to support a range of procurement strategies. It is focused on the two aspects of how 'early contractor involvement' was stage-managed and how the development of the target cost was controlled in the 'early involvement' stage when the commercial incentive on the contractor is inevitably to push the target upwards.

This issue of *Management, Procurement and Law*, has therefore full coverage of the main issues that form the core themes of the journal and provides a valuable contribution to the advancement of the state of knowledge in the construction industry.

REFERENCES

- Babatunde S, Perera S, Udejaja C and Zhou L (2014) Challenges of implementing infrastructure megaprojects through public-private partnerships in Nigeria: a case study of road infrastructure. *International Journal of Architecture, Engineering and Construction* **3(2)**: 143–155.
- Costantino N and Pellegrino R (2015) Public-private partnership implementation: cross-case analysis. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **168(4)**: 164–176, <http://dx.doi.org/10.1680/mpal.1400025>.
- Davenport TH (1994) Saving IT's soul: human-centered information management. *Harvard Business Review* **72(2)**: 119–131.
- Fidic (International Federation of Consulting Engineers) (1999) *Conditions of Contract for Plant and Design-Build*, 1st edn. Fidic, Geneva, Switzerland.
- Gan S (2015) Briefing: Provisional sums: practical use under the Fidic Yellow Book. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **168(4)**: 159–163, <http://dx.doi.org/10.1680/mpal.14.00015>.
- GCP and OE (Global Construction Perspectives and Oxford Economics) (2013) *Global Construction 2025*. See <http://www.globalconstruction2025.com/> (accessed 10/07/2015).
- Laryea S and Watermeyer R (2014) Innovative construction, procurement at Wits University. *Proceedings of the Institution of Civil Engineers – Management Procurement and Law* **167(5)**: 220–231, <http://dx.doi.org/10.1680/mpal.14.00008>.
- Laryea S, Watermeyer R and Patterson R (2015) Discussion: Innovative construction procurement at Wits University. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **168(4)**: 199–201, <http://dx.doi.org/10.1680/mpal.1500013>.
- Lee C, Perera S and Hogg K (2013) An analysis of early career training requirements of quantity surveying professionals. *International Journal of Strategic Property Management* **17(2)**: 161–173.
- Li B, Akintoye A, Edwards PJ and Hardcastle C (2005) The allocation of risk in PPP/PFI construction projects in the UK. *International Journal of Project Management* **23(1)**: 25–35.
- Murray M, Ross A, Blaney N and Adamson L (2015) Mentoring undergraduate civil engineering students. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **168(4)**: 189–198, <http://dx.doi.org/10.1680/mpal.1400043>.
- Olayinka R, Suresh S and Chinyio E (2015) Impact of knowledge management on the cost of poor quality. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **168(4)**: 177–188, <http://dx.doi.org/10.1680/mpal.1400035>.
- RICS (Royal Institution of Chartered Surveyors) (2012) *RICS New Rules of Measurements, vol. 2 – Detailed Measurement for Capital Building Works*, 1st edn. RICS, London, UK.