

Editorial

Sam Wamuziri MSc, PhD, MBA, CEng, MICE, MASCE, FRSA
Professor of Project Management and Strategic Development,
Glyndŵr University, Wales, UK, and Chairman, Editorial Advisory Board



It is with great pleasure that I welcome you to the November 2012 issue of the *Management Procurement and Law*. The Journal publishes original research and practice papers on all civil engineering and construction aspects of management, procurement and law as part of the *Proceedings of the Institution of Civil Engineers*. Before providing a review of the papers in this issue, I would like to offer a perspective on topics of current interest to the construction industry.

London hosted the 2012 Olympic and Paralympic Games successfully. Perhaps of particular interest to the construction industry is the fact that the Olympic park, other venues and related infrastructure were all built on time and within budget. Furthermore, the facilities were delivered with no construction-related deaths. This is a tremendous achievement for the industry. Construction sites will always remain hazardous working environments because of the presence of a whole range of risk sources including for example, heavy materials being moved by heavy machines, noise from high power tools, hazardous chemicals, bad weather and of course the intense pressure to complete projects on time. The successful and safe delivery of the London 2012 Olympic and Paralympic Games facilities and infrastructure demonstrates that the zero-injury objective in construction while remaining a challenge and perhaps some way off into the future; is indeed achievable. This goal can be achieved by deploying a range of initiatives including for example integration of technology, human behavioural change and management systems. A full list of ICE Proceedings papers relating the 2012 Games is available at the following link (<http://www.icevirtuallibrary.com/info/learninglegacy>).

The state of the global economy remains sluggish. Unemployment levels are unacceptably high and the much needed investment in construction is low worldwide. Fortunately, prospects for the future look promising. It is projected that over the next decade, the global economy will grow on average by approximately 3% per annum and a total of nearly US\$100 trillion will be invested in construction globally (International Monetary Fund, 2012). Rising populations, rapid urbanisation and strong economic growth in some regions will be key drivers for investment. The largest construction markets over this period will include China, India, Russia, Turkey, Australia, Canada, South America, Nigeria, South Africa and some parts of sub-Saharan Africa. Private sector participation and funding together with strong government support will remain

crucial in directing this investment into essential public services and infrastructure including hospitals, schools, water, telecommunications, energy and transportation.

On the subject of occupational health and safety law, the view that there is too much law has been confirmed by the Löfstedt review which found that occupational health and safety in the UK is governed by 17 different Acts of Parliament; over 200 Regulations and 53 Approved Codes of practice (Löfstedt, 2011). Many of these Regulations were found to be old and not representing the best way of delivering occupational health and safety given changes which have taken in industry practice over the years. Review of all Approved Codes of Practice (ACoPs) and sector specific reform and consolidation of the regulations is indeed to be welcomed. Successful implementation will simplify the regulatory framework and make laws easier to understand. This should enable clients, designers and contractors in the construction industry to fulfil their legal obligations. The new regulatory regime will hopefully focus on modern approaches to risk management and control while maintaining high levels of protection for workers in the construction industry and those who are likely to be affected by construction activities.

In May 2011, the UK government published its construction strategy to reform the way in which government procures construction projects. The strategy aims to reduce construction project costs by up to 20% by 2015. Construction output in the UK currently approximates £110 billion per annum of which 40% is in the public sector (Cabinet Office, 2011). The strategy advocates a procurement model that involves the following elements.

- Government publication of a forward programme of planned construction projects which will enable the construction industry to plan better and make informed decisions at their own risk regarding areas where to invest in products, services, technology and skills.
- Collaborative working in which designers and contractors work together to develop integrated solutions meeting specified client outcomes.
- Better supply chain management to incentivise research and innovation and development of standardised or mass customised products.
- Early contractor involvement with contractors engaging key members of their supply chains in the design process to maximise value.

- Alignment of interests between those who design and construct facilities, and those who later manage, maintain and occupy them.
- Maintaining competitive tension and value for money through benchmarking and target costing to understand project costs better rather than sub-optimal transfer of risk to construction contractors through lump sum tenders based on inadequate information.

Although these reforms represent a challenge for the industry, they are achievable. They call for better management in delivering major projects. The industry should welcome these reforms as they will enable closer collaboration, better supply chain management, better long-term planning and optimal risk allocation. If achieved, these reforms will deliver for taxpayers substantial savings estimated to be between £2 billion to £3 billion per annum.

Turning to this issue, it includes two briefing articles, three full papers, contributions discussing two papers published in previous issues and eight book reviews. The briefing by Baatz (2012) brings some clarity on legal coverage relating to payments and resolution of disputes through adjudication for certain process plant construction operations in the UK Housing Grants, Construction and Regeneration Act 1996. Atkins' (2012) facilities management briefing gives an overview of the new British Standard Code of Practice BS 8536:2010, which should provide clients, operators, facilities managers and designers with the necessary guidance on how to incorporate operational needs and requirements of a facility into the design process. Used correctly, this offers the potential to improve facilities user satisfaction and customer service and to lower overall whole-life costs of a facility.

The use of public-private partnerships (PPPs) to deliver infrastructure continues to expand worldwide. The PPP procurement model has its attractions and limitations. Amponsah and Forbes (2012) examine the critical success factors in project procurement based on this model using data collected using surveys and analysed by the analytic hierarchy process (AHP). The data is based on perspectives offered by clients, project managers, consultants, contractors, financiers and operators with substantial experience in such projects. The research identifies the crucial factors in delivering such projects but concludes that major participants in delivery of such projects do not agree on the ranking of these critical factors, owing to the fact that each group normally works towards maximising its own interests. Therefore careful negotiations paying particular attention to these factors will increase the likelihood of successful structuring and financing of such projects.

Successful delivery of major infrastructure projects also depends on taking the right decisions at the right time consistent with the

client's primary project objectives. Increasingly, clients particularly but not solely in developing countries seek to take into account other important factors often termed secondary objectives. Watermeyer (2012) outlines the key features of a construction procurement strategy and the range of options that are available to project clients. The work highlights the range of options available in the Fidic and NEC3 engineering and construction families of contracts and the ISO 10845 construction project standards. The factors which must be taken into account to achieve optimal project performance are given. The paper concludes that reducing the number of relationships in the procurement process offers the opportunity to overcome capacity constraints and reduces chances for corrupt activities when delivering projects.

Based on a qualitative paradigm, Nyando and Strasheim (2012) report results of research assessing labour-based construction works management processes. The management processes inherent in labour-based construction projects are identified based on principles of the Process Protocol. It is noted that although such projects have in the past performed poorly in relation to time, cost and quality targets, use of the framework provides a basis for understanding the diverse interests of various stakeholders in order to improve performance in management and future delivery in such projects

The discussion by Morgan and Mather (2012) underlines the role played by effective analysis and management of risk in delivery of major infrastructure projects. It is emphasised that critical risks are best avoided and that risk response plans should be developed for high or medium risks. Furthermore, low risks should not be ignored but should be monitored in case their probability of occurrence or their consequences increase.

Occupational health and safety education and training of engineers require continuity involving both academia and industry. This is highlighted in the discussion by Clarke and Anderson (2012) where it is emphasised that universities should continue to provide the initial education in the prevention of accidents and ill-health. However, it is made clear that the best place to learn about and practice occupational health and safety risk management is in the workplace.

Finally, the six book reviews are written by this journal's members of the editorial board. If you are thinking of buying any of the books, you may find these independent critiques helpful. I thoroughly enjoyed reading all the papers in this issue. I hope that you will as well. I look forward to reading your feedback.

REFERENCES

Amponsah CT and Forbes JL (2012) Public-private partnerships: critical factors for procurement of capital

-
- projects. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **165(4)**: 211–221, <http://dx.doi.org/10.1680/mpal.10.00041>.
- Atkin B (2012) Briefing: Facility management. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **165(4)**: 207–209, <http://dx.doi.org/10.1680/mpal.11.00017>.
- Baatz N (2012) Briefing: Payment and adjudication: the UK Construction Act process plant exclusion. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **165(4)**: 205–206, <http://dx.doi.org/10.1680/mpal.10.00031>.
- Cabinet Office (2011) *Government Construction Strategy*. See <http://www.cabinetoffice.gov.uk> (accessed 24/09/2012).
- Clarke BG and Anderson J (2012) Discussion: Educating engineers in the workplace. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **165(4)**: 255–256, <http://dx.doi.org/10.1680/mpal.11.00027>.
- International Monetary Fund (2012) *World Economic Outlook April 2012: Growth Resuming, Dangers Remain*. See <http://www.imf.org> (accessed 24/09/2012).
- Löfstedt RE (2011) *Reclaiming Health and Safety for All: An Independent Review of Health and Safety Legislation*. See <http://www.dwp.gov.uk/policy/health-and-safety> (accessed 24/09/2012).
- Morgan T and Mather J (2012) Discussion: Risk management critical to Crossrail's success. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **165(4)**: 253, <http://dx.doi.org/10.1680/mpal.11.00036>.
- Nyando CK and Strasheim JAVB (2012) Assessing labour-based construction works management processes. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **165(4)**: 239–251, <http://dx.doi.org/10.1680/mpal.10.00062>.
- Watermeyer RB (2012) A framework for developing construction procurement strategy. *Proceedings of the Institution of Civil Engineers – Management, Procurement and Law* **165(4)**: 223–237, <http://dx.doi.org/10.1680/mpal.11.00014>.