Editorial

Julie Wood BSc, CEng, FICE, FRICS, FCIM, HonFAPM
Director and Leader Major Complex Projects, Arup, London, UK

Welcome to the first issue of *Civil Engineering* in the 'twenties'.

As I write to meet publishing deadlines, the UK is in the middle of a general election. It is encouraging to see the two dominant political parties making substantial commitments to infrastructure funding, putting civil engineering firmly in the spotlight. But we still rarely hear the views of civil engineers, particularly with regard to major infrastructure projects. As ever, the profession seems to lack an appropriate media profile: let us make a change in 2020!

It is a theme picked up by the Institution of Civil Engineers' (ICE) new president Paul Sheffield, whose inaugural address leads this issue (Sheffield, 2020). During his presidential year he plans to promote civil engineering innovations to show people what the profession can do. He also says if we can, 'promote a positive, modern image, more innovative young people with a whole abundance of skills will want to join the profession' (Sheffield, 2020: p. 4). But he also reminds us to ensure our work is accurate, transparent and to the highest standard to maintain public trust: all these are very much in evidence in the four papers that follow.

In our first paper we head to a constrained urban site, not least due to the fact it was in a live rail environment. Rusev *et al.* (2020) bring to life the highly complex Ordsall Chord rail project in Manchester. The alliance contracting approach appears to have been a great foundation for the project, with a no-dispute clause having a beneficial influence on behaviours: early signs here of ICE's Project 13 enterprise approach. Of particular interest was the use of digital modelling in the approval process for the River Irwell footbridge, which resulted in an approval being completed in a day rather than weeks. It sends a strong message to the industry about the significant benefits of using a single digital model.

Yang *et al.* (2020) continue by covering whole-process risk in what is one of the most challenging civil engineering endeavours: building subsea tunnels. They set out the criteria for success and, importantly, continuous improvement. They conclude with a comprehensive case study of how risk was managed on the 6.7 km long Hong Kong–Zhuhai–Macau Bridge subsea tunnel project.

King (2020) then illustrates the potential and benefits of offsite modular construction with a case study of the Global Academy in west London. The project team set out 'with the end in mind' to use advanced offset modular approaches and associated technologies to realise substantial programme and

cost savings on this state-of-the-art media college. With many projects considering offsite solutions – not least to mitigate the impact on local communities – this paper will provide an invaluable reference.

We conclude with an update on CoST – the Infrastructure Transparency Initiative by Hawkins and Prado (2020). This now global initiative, which ICE helped to launch in 2008, aims to reduce corruption, mismanagement and inefficiency in public infrastructure. One of the more radical approaches is social accountability, with trained members of the public actively monitoring and providing feedback on live projects. The authors provide examples of several countries where the initiative has already achieved long-lasting reform in infrastructure delivery.

I hope you enjoy reading the diverse collection of papers in this issue. You can also access future papers in the Ahead of Print section of the ICE Virtual Library at <https://www.icevirtuallibrary.com/toc/jcien/0/0>. On behalf of the editorial panel, I would like to thank all the authors for their contributions and wish you all a healthy and enjoyable 2020.

References

- Hawkins J and Prado MGFA (2020) CoST – the Infrastructure Transparency Initiative: from disclosed data to sector reform. *Proceedings of the Institution of Civil Engineers – Civil Engineering* **173(1)**: 39–47, <https://doi.org/10.1680/jcien.19.00024>.
- King E (2020) Global Academy, London: how offsite modular construction is reshaping education. *Proceedings of the Institution of Civil Engineers – Civil Engineering* **173(1)**: 35–38, <https://doi.org/10.1680/jcien.19.00004>.
- Rusev R, Procter E and Duguid B (2020) Design, procurement and coordination of the Ordsall Chord rail project, Manchester, UK. *Proceedings of the Institution of Civil Engineers – Civil Engineering* **173(1)**: 18–26, <https://doi.org/10.1680/jcien.19.00008>.
- Sheffield P (2020) The future is already here – civil engineering at the cutting edge. *Proceedings of the Institution of Civil Engineers – Civil Engineering* **173(1)**: 3–9, <https://doi.org/10.1680/jcien.2020.173.1.3>.
- Yang WW, Tsang CK, Cai YX and Hu YM (2020) Whole-process risk management of subsea tunnel engineering. *Proceedings of the Institution of Civil Engineers – Civil Engineering* **173(1)**: 27–34, <https://doi.org/10.1680/jcien.18.00015>.

CALL FOR PAPERS: *Civil Engineering* relies entirely on material contributed by civil engineers and related professionals. Illustrated articles of 600 words and papers of 2000 to 3500 words are welcome on any relevant civil engineering topic that meets the journal's aims of providing a source of reference material, promoting best practice and broadening civil engineers' knowledge. Please contact the editor for further information