Book review

Specification for tunnelling, 3rd edition. London: British Tunnelling Society and The Institution of Civil Engineers, Thomas Telford Limited, 2010. 184 pp. ISBN 978-0-7277-3477-8. £45

The *Model Specification for Tunnelling* was produced by the British Tunnelling Society in conjunction with the Ground Board of the Institution of Civil Engineers in order to establish a common standard for tunnelling and was first published in 1997. It was subsequently revised in 2000, published as the *BTS Specification for Tunnelling* and became the standard specification for the majority of tunnelling contracts in the UK and formed the basis of tunnelling specifications for projects throughout the world. The third edition, namely *Specification for Tunnelling: Third edition*, has been published to take into consideration recent developments in tunnelling technology over the last decade and reflect current industry best practice. The document has been drafted by an expert editorial committee and has relied on experience of individual and corporate members of the BTS.

The specification is written in modular form, so that the whole document can be incorporated into contract documents. It indicates the minimum standards of materials and workmanship, and is written so that parties to a contract are as free as possible to agree on methods of carrying out the work. Although the document reflects UK tunnelling practice, it has been written so that it can be used in an international context with the minimum of modification. The document consists of five main sections and an index. The five sections are based on 'General requirements', 'Materials', 'Methods', 'Ground stabilisation processes' and 'Working environment'. Coverage of sprayed concrete has been expanded in recognition of its increased usage around the world and there are new sections on sprayed applied waterproof membranes and jacked box tunnelling. Importantly, all sections have been updated to reflect best current practice, changes in national standards and the new Eurocodes. Given the above I am sure the BTS specification will continue to be the standard reference text for tunnelling contracts in coming years.

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