LONG-SPAN BRIDGES

Editor’s comment

Long-span bridges have always held a fascination for structural engineers – and indeed, for the general public – with the longest bridges of each type generally categorised by their worldwide rating. When a new record is set, it is to ensure that it happens on a regular basis, the latest title-holder is accorded great publicity and guaranteed an audience around the world.

But as our supplement makes clear, the biggest challenges in long-span bridge engineering are not necessarily the record-breaking structures. These may be challenging when they are under construction – particularly if they are being built in regions which experience extreme weather conditions – but often they employ tried and tested design approaches and construction technologies, with the longer spans generally driven by topography or other project-specific criteria.

The skills of engineers and architects working on any long-span bridges can often be tested more thoroughly when it comes to designing them for highly-seismic locations, using unusual combinations such as those with multiple cable-supported spans in series, or being tasked with creating aesthetically-pleasing structures at this kind of scale.

In this special supplement we kick off with an overview of long-span bridges in China, where many of the world’s longest spans can currently be found; canvass opinion on the hot-topics in long-span bridges around the world, and report on some of the ongoing, planned and recently-completed long-span crossings. It is by no means exhaustive, that would be impossible in a publication of this size, but I hope it will give readers a flavour of some of the challenges the industry is facing today.

Helena Russell
Editor

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