High speed rail projects – risks and opportunities

Herbert Smith Freehills' Tokyo office recently welcomed some 70 clients and industry professionals to its 8th Annual Construction Conference. The theme of this year's conference was the growing global focus on high speed rail projects.

The event was chaired by Emma Kratochvilova, head of construction and infrastructure disputes in Herbert Smith Freehills' Tokyo office. Emma was joined by three of her colleagues from London: Patrick Mitchell, global head of infrastructure, Nicholas Downing, co-lead of non-contentious construction and engineering, and Mark Veitch, a senior associate who specialises in international construction and infrastructure projects.

This article summarises many of the highlights of the topics introduced by the presenters during the conference and the subsequent lively discussion prompted by them.

Global rail infrastructure opportunities

In a report issued earlier this year, the Japanese Ministry of Land, Infrastructure, Transport and Tourism identified major infrastructure projects globally, which are suitable for potential Japanese investment and participation in coming years. Almost a third of the projects on the list were rail or metro projects.

Industry predicted that the global transport sector is expected to outperform energy and utilities over the next ten years, and within the transport industry itself, rail is expected to be the fastest growing subsector. Partly as a result of this, but also due to the increasing infrastructure needs of emerging economies in the region, Asia has the largest project pipeline, and this is where the greatest number of opportunities will arise for international contractors. With Japan's long-running success with national and international rail projects, from civil engineering to rolling stock and operation and maintenance, the opportunities for corporate Japan are enormous.

Procurement models

Governments often choose a form of public private partnership (**PPP**) in order to offload a proportion of risk and remove the project from the public balance sheet. The flipside is that the shift of risk often makes this model more expensive than conventional models, and PPP arrangements are often not very flexible.

Interface and coordination risk

A key issue that is common to all major rail projects is interface and coordination risk. Given their multidisciplinary nature, the successful implementation of rail projects inevitably relies on carefully drafted agreements comprehensively dealing with interfaces at every stage, from design and procurement through to construction and operation.

The most successful projects are often those where the parties have addressed interface management and risk allocation, particularly between contractors, at an early stage. That, combined with mutually compatible dispute resolution procedures and careful control of the master programme, is essential to ensuring the smooth management of interface risk.

Collaborative contracting models

The New Engineering Contract (**NEC**) form is well known for the emphasis it places on collaboration between employers and contractors, and on reducing risk throughout projects.

One of the unique characteristics of the NEC form is its overarching commitment to collaboration. This is stated in the very first clause of the NEC form, which requires a "spirit of mutual trust and cooperation". The NEC form of contract also has other features designed to avoid risks, including a system of early warning notices and risk reduction meetings, which encourage both parties to deal with issues before they impact on time or costs. NEC's pain and gain share options also provide an incentive to collaborate effectively and avoid cost overruns.

In addition, from the discussion draft of the FIDIC Yellow Book 2nd edition, it would seem that greater transparency of information is likely to feature in the next edition of the FIDIC forms, which could be seen as a tentative step towards more openness in contract management, in order to assist the parties to manage risk events.

Resolution of disputes on rail projects

A number of common issues have arisen in rail disputes in recent years, which might be avoided on future projects.

Parties should sensibly allocate risk in relation to site, ground conditions and access, to those able to control it. Uneconomic risk contingencies can be avoided by giving contractors sufficient time and opportunity to identify such risks and notify the employer of the impact on price and completion, after which the risk transfers to the contractor.

Delay liability needs to be carefully considered in situations where there are multiple interfacing contractors on site at any one time – each with the potential to cause delay to one another's work as well as parallel delays to overall project completion. Innovative and effective early identification and compensation procedures exist that allow parties to receive real-time interim relief, pending a more traditional referral to a dispute adjudication board and/or arbitration.

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