Summary

There is no simple solution to the selection of procurement system in the construction context. With limited experience in FAB construction projects in Singapore, transaction costs analysis is adopted as an alternative approach to study two cases of different procurement systems, with construction costs and other factors being assumed to be equal.

Transaction costs are the costs in addition to construction costs, due to interaction of people over time on information searching, negotiation, monitoring and policing. The studies of the FAB project characteristics concluded that the key factors, bounded rationality, opportunism and asset specificity which contribute to transaction costs are having aggregating effects on FAB projects. It is mainly due to the fast-track nature and the complexity of the projects.

In the two case studies, the following major areas contributing to transaction costs were examined.
1. Searching for and qualifying suitable consultants, contractors;
2. organising for bidding and evaluating bids;
3. negotiating and contracting successful vendors;
4. monitoring performances of contracted parties;
5. measuring and policing of contractual obligations / rights;
6. engaging in politics between different contracted entities; and
7. cost of waiting that dissipated due to idleness.

The studies concluded that high transaction costs were involved in monitoring performance, policing contractual compliance, and politicking. The development of procurement system from Plant 1 (Management contracting) to Plant 2, (Design-and-Manage) has reduced transaction costs. Better management efficiency can be achieved with the reduction of transaction costs by adopting suitable procurement system and project organisation structure.