Submission No 8

INQUIRY INTO RAIL INFRASTRUCTURE PROJECT COSTING IN NSW

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Date received: 22/09/2011

General Purpose Committee No 3.

Rail costing approaches - manufacturer Versus project manager

Federal High-Speed Rail 2010 Study approach to costings is in Appendix D of the Study and can be downloaded from the Department of Transport and Infrastructure website. The approach used in the paper is that of a project manager.

A critical factor in the cost of rail infrastructure is whether the agency building a rail network is in a position to manufacture the network or has to treat it as a one off project. The cost of road projects is reasonably stable as the RTA is in a position to manufacture road networks. The cost of rail networks is being examined by you because the State is not in a position to manufacture rail networks. The state developed a capacity to manufacture rail networks in the 1850s.

With vertical fiscal imbalance arriving in the 1930s and crippling the State's borrowing capacity, the state government (its railway agency) ceased to be a major builder of rail networks and has lost its manufacturing capability. The major cost blowouts in infrastructure built and in forecast costs of proposed infrastructure is evidence that the government's rail infrastructure capacity is now only that of a project manager. The differences in approaches is described below. The project manager's approach to infrastructure is necessarily one of high overheads due to the greater risks involved.

To once again become a rail network manufacturer, the State must develop a stream of projects that will progress it along the learning curve.

In the attached paper I have assumed the State would make efforts to once again become a manufacturer of rail networks and perhaps become an agent of the Commonwealth for delivery of high-speed rail and freight rail. There are cost synergies if both Commonwealth and State have rail agencies that are rail network manufacturers drawing on common industry resources. If so, the costing approach in the attached paper on high-speed and freight rail is valid. (the paper is in two parts due to 5MB limit on parliament's email system - the State Government has a 10MB limit for its emails)

Simple rates per km for different types of construction are valid for a network manufacturer.

If the State is not prepared to once again become a manufacturer of rail networks, the State should pursue bus transport as its primary means of public transport and convert the metropolitan rail network to Busways.

Manufacturers approach

Government authorities like the RTA, Sydney Water (and Railcorp many years ago), 'manufacture' utility networks.

A manufacturer:
--- minimises costs and risks by having a continuous work program for itself and suppliers,
--- stages works to minimise the time from production start to goods being in service to reduce working capital,
--- seeks the cheapest possible capital,
--- operates a continuous quality improvement program in conjunction with a design improvement program,
--- operates a training program for employees,
--- ensures education programs are in place for the next generation of workers,
--- joins with workforce representatives to bully governments where the government role in the manufacturing process is being done less than efficiently.

Project managers approach

Projects have a start and a finish. They follow a series of steps to achieve an outcome. 'Finish' implies an ending of responsibility. A project approach results in moral hazard for on-going activity. Projects

are thus short term focused, and heavily transaction focused. The strengths of the project management approach to infrastructure creation must be tempered by its weaknesses.

PPPs fit the project model rather than the manufacturers model.

In a PPP there is no 'manufacturer' seeking to reduce network costs. The PPP participants aim is to maximise profit from each sub-transaction. We saw with the Waratah PPP that 5 years after the agreement was signed, Downer EDI finally decided it needed to hire people with manufacturing expertise to achieve the required quality standards.

The project managers approach is heavy in finance and legal experts and thus high in overheads. Whereas the manufacturer's approach is heavy in engineering to achieve, quality, cost and environmental objectives.

Regards

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