

## **Adelaide Rail Freight Movements Study – Terms of Reference**

The Australian Government has committed funds to undertake a comprehensive study into the feasibility of improving the capacity and the efficiency of the main interstate freight rail line between Murray Bridge and Adelaide. The study will look specifically at the feasibility of a new alignment that would run to the north of Adelaide. It will also identify other options that may involve any of capital investment, further maintenance or improved flow management.

### **1. Study objectives**

The Study objectives are to:

- Provide an analysis of both current freight rail movements and the forecast growth in freight movements to and through Adelaide (this includes freight moving east, west and north);
- Provide an analysis of capacity of the line to meet this demand both now and in the future including with respect to standards for track capacity;
- Provide an analysis of the impact of the current alignment of the main interstate freight rail line on community amenity (economic, social, safety and environmental impacts); and
- Identify options to ensure the forecast growth in demand can be met along with an assessment of their feasibility in terms of costs and benefits (in this context, costs will take account of the likely impact on community amenity).

### **2. Study area**

The Study is to include consideration of the current alignment of the Melbourne Adelaide interstate freight rail line and the proposed northern access alignment. This will include the two key points where the interstate track crosses over urban passenger rail lines at Goodwood Junction and Torrens Junction and the impacts these junctions have on rail and road movements.

### **3. Other studies**

This Study should consider other transport infrastructure studies including but not limited to:

- Transport Sustainability Study in South Australia;
- Northern Connectors Study;
- South Australian Rail Freight – a bypass to save the heart of Adelaide;
- Melbourne-Adelaide Corridor Strategy;
- Adelaide Urban Corridors Strategy; and
- Adelaide-Perth Corridor Strategy.

The study should also take account of work associated with upgrading the public transport network in Adelaide, including resleepering and electrification.

### **4. Methodology**

In order to fulfil the Study objectives and deliver key outputs, an indicative project methodology, which may be modified and/or refined in consultant submissions, is as follows:

- An analysis of the east-west rail freight task along the Melbourne to Adelaide and Adelaide to Perth and Adelaide to Darwin corridors and the Adelaide Urban Corridors – the analysis will need to consider the current task and forecast growth in the task over the next 5, 10, 20 and 30 years, using previous studies where relevant. The analysis should consider at a minimum:
  - Frequency of freight trains;
  - Origin and destination of freight;
  - Volume of freight moving along the corridors;
  - Value of the freight moving along the corridors; and
  - any significant developments that would have an impact on the freight task (eg the proposed pulp mill at Penola, and possible intermodal hub at Monarto).
- A detailed assessment of the current rail alignment from Murray Bridge through the Adelaide Hills into Adelaide, including connections to the Port of Adelaide and intermodal terminals at Dry Creek and Islington. The assessment will need to consider at a minimum:
  - infrastructure capability and train operations requirements – existing and future constraints in terms of speed of freight trains, single/double stacking, axle loads, container sizes, train lengths, end-to-end journey times and rolling stock and gauge requirements;
  - connectivity with the Port of Adelaide and existing and proposed intermodal terminals;
  - interaction with the passenger rail network and road network;
  - safety issues; and
  - environmental issues, including specifically noise levels through the Adelaide Hills (including wheel squeal).
- The identification of options to ensure the forecast growth in demand in the rail freight task and requirements in relation to standards for track capacity can be met – options may include (but should not be limited to) capital investment options (e.g. alignment options), maintenance options (e.g. reducing cant deficiencies), flow management options (e.g. reduced speed or improved signalling technologies). A strategic merit test and rapid appraisal, consistent with the *National Guidelines for Transport System Management in Australia* (ATC, 2006), is to be completed for each option.
  - The strategic merit test is to be used to identify how well each option would contribute to transport system objectives, policies and strategies along with any barriers to its implementation.
  - The rapid appraisal for each option is to incorporate an indicative assessment of the main benefits and costs associated. It is also to include a high level risk assessment of the financial, engineering and environmental issues for the option.

## **5. Consultation**

The consultants will convene regular meetings and briefings with a Project Reference Group during the study process. The Project Reference Group will be established to ensure appropriate input from and engagement with key interest groups. The Project Reference

Group will include the Australian Rail Track Corporation, the Freight Rail Operators Group, Mitcham Council and the Local Government Association of SA.

The consultants will be required to prepare a discussion paper and invite submissions.

## **6. Timeframe**

The Study is expected to take up to 12 months.

The study will produce a final report setting out the feasible options that would ensure the forecast growth in demand in the rail freight task can be met along with an assessment of their feasibility in terms of costs and benefits and which takes account of issues raised in response to the Discussion Paper is to be submitted by end August 2009.