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CONSULTATION PROCESS

REQUEST FOR FEEDBACK AND COMMENTS

The Department is seeking feedback and comments on the issues and potential remedies identified in this consultation paper, for managing demand forecasting and patronage risk in PPP/toll road projects.

This proposal is part of a package of microeconomic reforms aimed at improving the planning and delivery of public infrastructure across the nation.

Submissions may be lodged electronically or via post using the address details provided below. For accessibility reasons, please email responses in a Word or RTF format. An additional PDF version may also be submitted.

All information (including name and address details) contained in submissions will be made available to the public on the Department of Infrastructure and Transport website, unless you indicate that you would like all or part of your submission to remain in-confidence. Automatically generated confidentiality statements in emails do not suffice for this purpose. Respondents who would like part of their submission to remain in-confidence should provide this information marked as such in a separate attachment. A request made under the Freedom of Information Act 1982 (Commonwealth) for a submission marked ‘confidential’ to be made available will be determined in accordance with that Act.

Closing date for submissions: 30 March 2012

Email: Patronage_submissions@infrastructure.gov.au

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INTRODUCTION AND BACKGROUND

INTRODUCTION

Traffic forecasts for some recent Australian toll roads have proven to be significantly inaccurate and over-optimistic. This has impacted on investor confidence, reducing the willingness of the private sector to accept patronage risk on toll road projects.

The result has been the diversion of scarce resources towards underperforming investments and a dent in confidence in Public-Private Partnerships (PPP) in Australia. The outcome has been lost opportunities to increase the productivity of the Australian economy.

As a major financier of economic infrastructure, the Commonwealth Government recognises that this is a national problem and is committed to working with the states and territories on improving approaches to managing demand forecasting and patronage risk for infrastructure projects.

As part of its microeconomic reform agenda, the Commonwealth Government is taking a leadership role in addressing the issues and finding potential solutions for managing patronage forecasting. The Commonwealth Department of Infrastructure and Transport (Department) is coordinating a national response through its reporting to the Council Of Australian Governments (COAG) Infrastructure Working Group (IWG) and through the work done to date by the Bureau of Infrastructure, Transport and Regional Economics (BITRE).

BACKGROUND

While evidence shows that the recent patronage forecasting performance for certain PPP/toll roads in Australia has been poor, international experience shows that there is also a pattern of consistent over-estimation of traffic demand for PPP/toll roads overseas. Efforts are being made to gain a better understanding of the causes of over-optimistic traffic forecasts for PPP/toll roads in Australia.


BITRE completed a literature review of international experiences in toll road forecast outcomes. This review identified and discussed several factors which may contribute to inaccurate forecasts. The BITRE literature review, titled A review of traffic forecasting performance of toll roads.

BITRE also co-hosted a Patronage Forecasting Symposium with Infrastructure Partnerships Australia in Canberra in June 2011, bringing together senior private and public sector officials with expertise in toll road projects. They discussed issues related to over-optimistic forecasts and possible remedies for improving demand forecasts and patronage risk. A summary of the symposium outcomes, titled Patronage forecasting symposium: summary of outcomes.

In addition, BITRE engaged consultants to undertake an independent examination of several recent toll road projects in Australia. GHD, in association with the international expert Dr Robert Bain, was tasked with preparing a report outlining the key causes of over-optimistic patronage forecasts and identifying potential remedies to improve the accuracy of patronage forecasting in the future. This report, titled An investigation of the causes of over-optimistic patronage forecasts for selected recent toll road projects.
SUMMARY OF POTENTIAL REMEDIES

The three reports, derived from independent sources, propose a wide range of potential remedies relating to improved modelling, data and removing bias embedded into procurement processes. Examples of these potential remedies are broadly categorised and summarised below for consideration and comment.

[Key to source of remedy: LR - BITRE literature review; S - Symposium outcomes; GHD - GHD report.]

1. MODELS
   a. Research and development to improve model inputs [GHD/LR/S] – such as travel costs, peak spreading, freight traffic, travel demand decisions and values of time and reliability.
   b. New models [GHD/S] – encourage new model forms, with a requirement for bidders to present one set of forecasts based on a specified model (e.g. Strategic Travel Model or ‘official’ government-provided model with key specified parameters).
   c. Post-model review/validation [GHD/LR] – to test and check outputs, ensuring model results are reviewed, updated and improved during project development and assessment, not held constant as has been past practice.

2. DATA
   a. Improved data [GHD/LR/S] – expanded data collection, improved availability, more recent and detailed data to support better modelling, such as - traffic segmentation; more localised and improved service level data; origin-destination commercial freight data; and greater sharing of data by governments, toll road companies and third parties.
   b. Government provided data [GHD/LR] – government agencies to undertake research and consultation to supply traffic/travel data and socioeconomic data (e.g. future land-use patterns, economic activity and population).

3. PRE-TENDER PROCESSES
   a. Independent review [GHD/LR] – independent expert on forecasting team to ensure ongoing review during development of forecasts.
   b. Forecasting team independent of project team [S] – to avoid bias where one party may have an interest in the project going ahead.
   c. Reference class forecasting [LR] – benchmarking forecasts against actual observations from a reference class of comparable situations.
   d. Probabilistic risk analysis [LR] – use monte-carlo analysis to see how results vary under different combinations of assumptions with associated probability distributions..

4. TENDER CONDITIONS
   a. Toll rates [GHD] – toll levels and escalation are set by the bidder.
   b. Audit report [GHD] – a requirement that an audit report be submitted with the bid addressing a set of key questions about input parameters and forecasts.
   c. Encouragement of long-term equity in projects [GHD/S] – encouragement for consortia that are likely to be ‘in it for the long run’ since they may have greater incentive to produce realistic forecasts. This could be achieved through weighting in assessment.
5. **Bid Assessment**

a. **Short listing [GHD]** – to two bidders, based on consortia capacity and experience, to reduce bidding costs and allow the proponent to work more co-operatively with the bid teams.

b. **More holistic assessment [GHD/S]** –
   
   - more holistic technical assessment processes that consider forecast values as well as processes and may thus avoid rewarding very over-optimistic forecasts
   - governments could focus more on maximising overall community welfare rather than purely minimising the short-term cost to government.

c. **Common assumptions [S]** – governments could insist bidders submit forecasts using a common set of assumptions to rule out any potential over-optimistic model inputs.

d. **Downward adjustment [LR]** – explicit adjustments to traffic estimates based on past experiences.

e. **Commercial case [GHD]** – a commercial case for the project is prepared in addition to the economic case, to check if full private funding is likely to be commercially viable.

f. **Stress tests [GHD/LR/S]** – to be applied to explore worst case scenarios.

g. **Risk management [GHD/LR]** – present projections as a clearly defined range of likely outcomes and assess project viability against outcomes.

6. **Other**

a. **A framework or guidelines [S]** – develop a best-practice framework or guidelines for the modelling community for developing more accurate and viable forecasts for toll roads.

b. **PPP structures [S]** – consider alternative models for structuring PPPs such as:
   
   - risk alignment –
     
     i. governments bear more of the demand risk
     
     ii. governments facilitate opportunities to buy into projects and on-sell at different stages of the project life;
   
   - ‘cap and collar’ [GHD/LR/S] – governments issue traffic forecasts and make or receive payments if traffic growth is different to the forecast;
   
   - secondary loans – governments invest directly in the project. Traffic risk remains with the private sector, while the government has an incentive to ensure revenue forecasts are realistic;
   
   - availability payments – to underwrite some of the underlying traffic and revenue risk associated with a toll facility;
   
   - early year risk sharing [GHD] – include some government payment or early year risk sharing in commercially risky projects;
   
   - sale of road after the ramp-up period – government directly procures the road then sells it to the private sector after the ramp-up period, when traffic risk has reduced.

c. **Professional or criminal penalties for deceptive forecasts [LR]** – to curb strategic misrepresentation in forecasting and planning.

d. **Forecasters share financial responsibility [LR]** – part of the remuneration of forecasters is made dependent on traffic levels relative to forecasts.

e. **Allow for self-correction [S]** – avoid inappropriate reaction to problems which the market may address itself.
THE PROPOSAL AND CONSULTATION QUESTIONS

THE PROPOSAL

The proposal for consultation is to seek the views of wider Industry Participants and other interested parties, on the analysis, issues and proposed potential remedies outlined in this paper and the accompanying reports.

The information in the attached reports has been prepared to facilitate discussion and are not the views of the Department or the Australian Government.

Pending the result of the public consultation process, the Department will work with the states and territories to develop possible measures to implement any proposed reforms.

CONSULTATION QUESTIONS

There is now an opportunity for all interested parties to progress the work already undertaken in this area. The Department is seeking your comments and views on:

1. From the summary of potential remedies provided in this consultation paper and the more detailed discussion of the potential remedies contained in the papers, what are the key solutions for addressing issues in patronage forecasting and how should they be progressed?

2. Are there other issues for demand risk projects not necessarily related to patronage forecasting, that should be resolved concurrently, or prior to addressing patronage forecasting concerns?

3. What role do you see for the Government regarding patronage forecasting and why?

4. If you see a role for the Government, to what extent would national guidelines assist in addressing patronage forecasting concerns?