ANSWERS TO QUESTIONS ON NOTICE

Additional Estimates 2015 - 2016

Infrastructure and Regional Development

Question no.: 220

Program: n/a

Division/Agency: Australian Rail Track Corporation

Topic: Inland Rail

Proof Hansard Page: Written

Senator Sterle, Glenn asked:

- 1. Estimates QON 73 Answer from October 2015 Estimates indicated that \$1.07 million was spent by the Department, and \$15.3 million was spent by ARTC to prepare the Inland Rail business case. Apart from that spending, what other elements of Inland Rail have incurred costs this financial year what elements and how much for each element? (Estimates QON 75 says that ARTC spent \$8.8 million in the first 5 months of 2015-6).
- 2. What is the total estimate of actual spending that will be incurred for 2015-6 on Inland rail by the Department and ARTC?

Answer:

1. As a matter of clarification, QON 73 outlined expenditure on preparing the Inland Rail business case covering more than one fiscal year. QON 75 outlined the Australian Rail Track Corporation's (ARTC) expenditure to prepare the business case (\$640,904) and other activities to progress the Inland Rail Programme (\$8,258,020) for the four months to 31 October 2015.

In response to Question SQ16-000218, ARTC's expenditure incurred for the eight months from 1 July 2015 to 29 February 2016 totals \$15,853,688. See chart below:

Total Expenditure from 1 July 2015 to 29 February 2016		\$
Technical engineering and environmental		\$1,785,663
Field surveys, design, site trials, geotechnical		\$5,214,968
Commercial and legal		\$1,762,480
Community and stakeholdere ngagement		\$465,012
Risk, controls and programme management		\$5,742,141
	Sub-total	\$14,970,266
Business Case Preparation		\$883,422
	Grand-total	\$15,853,688

2. The ARTC forecasts expenditures for the Inland Rail Programme will total \$47,004,240 for the fiscal year from 1 July 2015 to 30 June 2016. See chart below:

Total Expenditure for Fiscal Year from 1 July 2015 to 30 June 2016		\$
Technical engineering, evironmental and rail systems		\$3,190,614
Field surveys, design, site trials, geotechnical		\$22,237,056
Commercial and legal		\$3,130,440
Community and stakeholder engagement		\$1,698,572
Risk, control systems and programme management		\$15,513,494
	Sub total	\$45,770,178
Business Case Preparation		\$1,234,062
	Grand	
	Total	\$47,004,240

ANSWERS TO QUESTIONS ON NOTICE

Additional Estimates 2015 - 2016

Infrastructure and Regional Development

Question no.: 221

Program: 1.1 Infrastructure Investment

Division/Agency: Australian Rail Track Corporation

Topic: Brisbane to Sydney rail line – transit time and upgrades

Proof Hansard Page: Written

Senator Rice, Janet asked:

- 1. Has there been any reduction in transit time for the Brisbane-Sydney freight trains and for the XPT due to various track upgrades undertaken by the Australian Rail Track Corporation?
- 2. If so, by how many minutes for most freight trains?
- 3. What is the government's position on investment in deviations, as opposed to curve easing, to speed up freight and passenger trains, both north of Maitland, and between Broadmeadow and Gosford?

Answer:

- 1. Yes.
- 2. Average scheduled transit times for the Brisbane-Sydney freight trains have been reduced by approximately 233 minutes, from around 21 hours in 2004 to around 17.1 hours in 2015.
- 3. In its recently released Australian Infrastructure Plan, Infrastructure Australia identified Newcastle to Sydney rail line upgrades and Lower Hunter freight corridor construction as proposed initiatives over the longer term (10 to 15 years). We are not aware of any current proposals for rail deviations north of Maitland.

ANSWERS TO QUESTIONS ON NOTICE

Additional Estimates 2015 - 2016

Infrastructure and Regional Development

Question no.: 222

Program: 1.1 Infrastructure Investment

Division/Agency: Australian Rail Track Corporation

Topic: Inland Rail

Proof Hansard Page: Written

Senator Rice, Janet asked:

What is the current view regarding the capability of an inland railway to have double stacked containers and Queensland Mainline Upgrade ruling curvature of 2200 metres (as opposed to 800 metres), or less of tight radius curves that extend for much of the existing Melbourne-Sydney-Brisbane line?

Answer:

The performance standards for Inland Rail are specified in the Inland Rail Service Offering, which was developed in close consultation with the rail freight and logistics industry.

The Service Offering includes:

- a. 7.1 metre vertical clearances for double stack container operations;
- b. general alignment standards that incorporate a design speed of 115km/h, 1200 metre target curve radius and 800 metre minimum curve radius; and
- c. alignment standards in mountainous terrain that incorporate a design speed of 80km/h, 800 metre target curve radius and 400 metre minimum curve radius.

Please find a copy of the Inland Rail Service Offering March 2016 at Attachment A.



ARTC



ABOUT INLAND RAIL

The Inland Rail programme is a new freight rail connection that will complete the 'backbone' of the national freight network between Melbourne and Brisbane via regional New South Wales and Oueensland.

This transformational 21st century infrastructure will position Australia to meet the freight challenge of the coming decades, providing a direct standard gauge rail connection between the Queensland, New South Wales, Victoria, South Australia and Western Australian economies.

This freight connection will see rail become competitive with road transport between Melbourne and Brisbane on transit time, reliability and price and will provide important development opportunities for regional Australia.

With these competitive advantages, rail mode share is expected to rise significantly.

The Inland Rail programme is the Australian Government's priority freight rail project. It has committed \$300 million to the programme to date and appointed the Australian Rail Track Corporation (ARTC) to develop the delivery programme for Inland Rail and start early works.

DEVELOPING THE SERVICE OFFERING

Inland Rail is customer-centric infrastructure that will offer freight customers on the east coast competitive pricing, 98 percent reliability, a transit time from Melbourne to Brisbane of less than 24 hours, flexibility for faster and slower services and freight that is available when the market wants.

This service offering is central to Inland Rail and reflects the priorities of freight customers for a road competitive service based on reliability, transit time, price and availability.

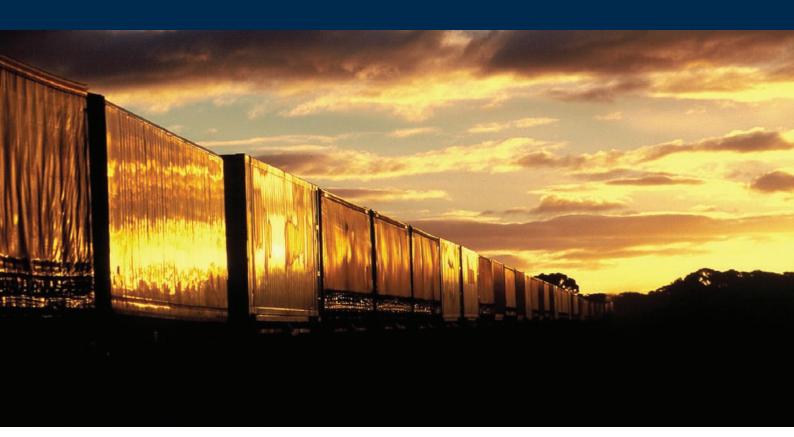
This service offering was developed in close consultation with customers, rail users and other key stakeholders. These key stakeholders were asked for their views during the 2010 Inland Rail Alignment Study, through a subsequent industry survey, through extensive one-on-one interviews and, most recently, through two Stakeholder Reference Group Forums convened by the Department of Infrastructure and Regional Development in May and October 2014.

The industry and freight customers have been absolutely consistent in expressing their priorities throughout this process and these remain at the core of the Inland Rail service offering.

Participants at the Stakeholder Reference Group Forum held in Sydney in October 2014 also highlighted the need for flexibility, for interoperability and to clearly state the target for reliability. They also highlighted the importance of terminals.

This feedback is reflected in the current service offering, with clear potential for faster and slower services to meet customer needs (while preserving the core offering of a 24 hour transit time from Melbourne to Brisbane), a clearly specified reliability target of 98 percent and clarity around the commitment to interoperability with connections to the New South Wales country rail network and Queensland narrow gauge network. While the service offering is specific to the rail network, terminals are a critical element and ARTC will continue to work with terminal operators and proponents as it progresses Inland Rail.





KEY ELEMENTS OF THE SERVICE OFFERING

The key characteristics that underpin the service offering are reliability, price, transit time and availability. These are underpinned by the key technical characteristics that are particularly relevant to ARTC's direct customers – rail operators – as these directly influence operating cost structures and their own service offerings to the market.

A ROAD COMPETITIVE OFFERING







Price



Transit time

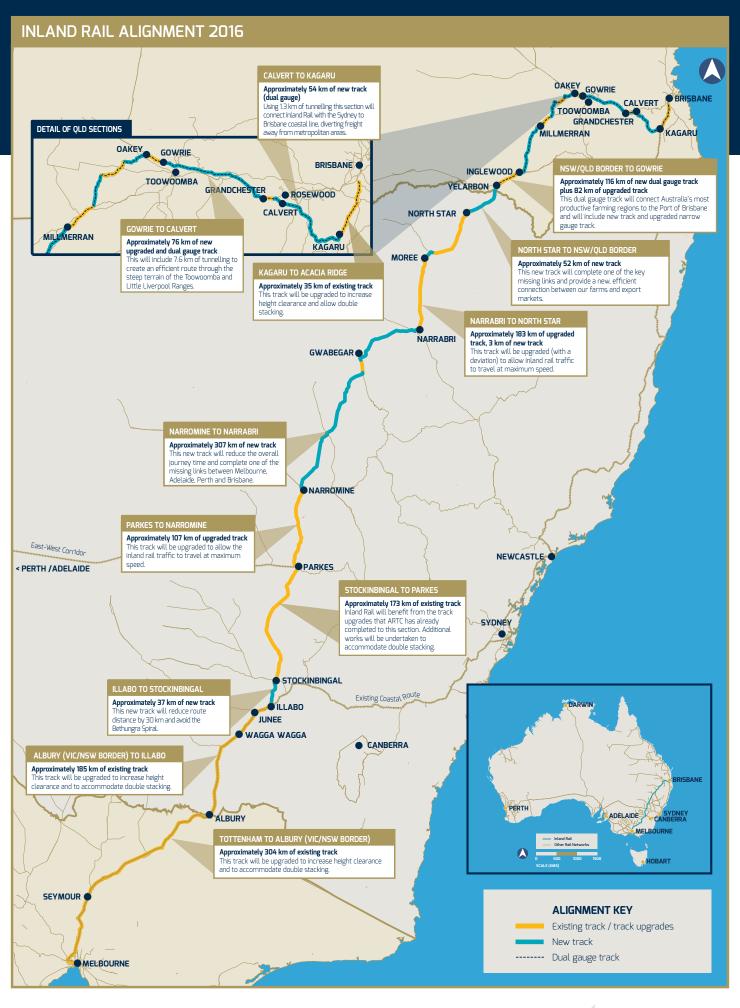


Freight available when the market wants

» Inland Rail - Key technical characteristics that underpin the service offering		
Train Length	1800 m with future proofing for ultimate 3600 m train length	
Axle Load / Max Speed	21 tonnes @ 115 km/h, 25 tonnes @ 80 km/h, with future proofing for 30 tonnes @ 80 km/h	
Double Stacking	7.1 m clearances for double stack operation	
Interoperability	 Full interoperability with the interstate mainline standard gauge network Dual-gauging in Queensland to provide for connectivity to the Queensland narrow gauge regional network Connections to the NSW Country Regional Network to provide for standard gauge connections to the ports of Melbourne, Port Kembla, Sydney, Newcastle, Brisbane, Adelaide and Perth 	

INLAND RAIL PERFORMANCE SPECIFICATION

ATTRIBUTE	SPECIFICATION
Reference Train	
Intermodal	21 tonne axle load, 115 km/h maximum speed, 1800 m length (initial), 2.7hp/tonne power:weight ratio
Coal / bulk	25 tonne axle load (initial), 80 km/h maximum speed, length determined by customer requirements within maximum train length
Operational Specification	
Freight train transit time (terminal to terminal)	Target driven by a range of customer preferences and less than 24 hours Melbourne-Brisbane for the intermodal reference train. Flexibility to provide for faster (higher power:weight ratio) and slower (lower power:weight ratio) services to meet market requirements
Gauge	Standard (1435 mm) with dual standard / narrow (1067 mm) gauge in appropriate Queensland sections
Maximum freight operating speed	115 km/h a 21 tonne axle load
Maximum axle loads (initial)	21 tonnes @ 115 km/h 23 tonnes @ 90 km/h 25 tonnes @ 80 km/h
Clearance (terminal to terminal)	As per ARTC Plate F for double stacking (7.1 m above rail)
Maximum train length (initial)	1800 m
Braking Curve	G40 for intermodal reference train
Minimum Design Standards	
General alignment standards	
Design speed	115 km/h
Maximum Grade	1:100 target, 1:80 maximum (compensated) 1:200 maximum at arrival or departure points at loops
Curve radius	1200 m target, 800 m minimum
Cant / cant deficiency	Set for intermodal reference train
Medium speed alignment standards	s (mountainous terrain)
Design speed	80 km/h minimum
Maximum Grade	1:100 target, 1:50 maximum (compensated) 1:200 maximum at arrival or departure points at loops
Curve radius	800 m target, 400 m minimum
Cant	Set for coal reference train
Corridor width	40 m minimum
Rail	Minimum 53 kg/m on existing track; 60 kg/m on new or upgraded track
Concrete sleepers	Rated @ 30 tonne axle load
Sleeper spacing	667 mm spacing (1500/km) - existing track 600 mm (1666/km) - new corridors / track or re-sleepering existing track
Turnouts	Tangential, rated at track speed on the straight and 80 km/h entry / exit on the diverging track.
Crossing loops (initial)	1800 m (clearance point to clearance point) plus signalling overlap No level crossing across loops or within road vehicle sighting distance from loops
Future Proofing	
Train length	To provide for future extension of maximum train length to 3600 m
New structures	Capable of 30 tonne axle load @ 80 km/h minimum
Formation	Formation on new track suitable for 30 tonne axle load @ 80 km/h
Crossing loops	Loops designed and located to allow future extension for 3600 m trains
Reliability and availability	Competitive with road





ANSWERS TO QUESTIONS ON NOTICE

Additional Estimates 2015 - 2016

Infrastructure and Regional Development

Question no.: 223

Program: n/a

Division/Agency: Australian Rail Track Corporation

Topic: Scoping Study into the Australian Rail Track Corporation (ARTC)

Proof Hansard Page: Written

Senator Edwards, Sean asked:

Has the scoping study for ARTC yet been completed? If not then when do you expect it to be finished?

Answer:

The Scoping Study is being managed by the Department of Finance. The Government is expected to consider the outcome of the Scoping Study as part of the 2016-17 Budget process.

ANSWERS TO QUESTIONS ON NOTICE

Additional Estimates 2015 - 2016

Infrastructure and Regional Development

Question no.: 224

Program: n/a

Division/Agency: Australian Rail Track Corporation

Topic: Scoping Study into the Australian Rail Track Corporation

Proof Hansard Page: Written

Senator Edwards, Sean asked:

Can we expect ARTC to be sold and if so, will the sale process commence in 2016?

Answer:

No decision on the future ownership of Australian Rail Track Corporation has been made.