

Rural & Regional Affairs and Transport Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates 2016 - 2017

Infrastructure and Regional Development

Question no.: 137

Program: 1.1 Infrastructure Investment

Division/Agency: Infrastructure Investment

Topic: Freight Trains

Proof Hansard Page: Written (28 October 2016)

Senator Rice, Janet asked:

Has there been any reduction in transit time for the Melbourne-Sydney freight trains and for the XPT due to various track upgrades undertaken since 2008 by the Australian Rail Track Corporation?

- a) If so, by how many minutes for most freight trains?
- b) What is the government's position on investment in deviations, to speed up freight and passenger trains, between Macarthur and Junee.

Answer:

Yes

- a) There has been a reduction of around 2.5 hours to 3 hours since 2008 dependent on train service type and schedule (Source: Bureau of Infrastructure, Transport and Regional Economies). Scheduled transit times are influenced by a number of factors including line speed; the number of stops en route; the number and type of other trains on the line and operator-dependent factors such as time spent in intermediate cities. Customers have also advised that market demand for transit time reductions is less a priority than reliability, and have been happy to stick with existing train paths and timings over recent years.
- b) The Department is not aware of any current proposals for rail deviations between Macarthur and Junee. The Government would need to consider proposals for rail deviations in this area on their merits according to consideration of their supporting business cases by Infrastructure Australia.

Rural & Regional Affairs and Transport Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates 2016 - 2017

Infrastructure and Regional Development

Question no.: 201

Program: N/A

Division/Agency: Australian Rail Track Corporation

Topic: Inland Rail

Proof Hansard Page: Written (28 October 2016)

Senator Rice, Janet asked:

What progress has been made in the third quarter of 2016 towards starting work on the Inland Railway between Melbourne, Parkes and Brisbane

Answer:

Key milestones achieved on the Inland Rail Programme in the third quarter of 2016 were:

- ARTC completed Concept Design for the entire programme and developed draft tender documentation for further stages of Inland Rail development (including draft tender documentation for Reference Design and Environmental Assessment).
- ARTC called for Expressions of Interest for Technical and Approvals Consultancy Services. This will result in a shortlist of consultants that will proceed to Request for Tender for Environmental Assessment and Reference Design activities from early 2017 onwards.
- ARTC developed an Australian Industry Participation (AIP) Plan for Inland Rail, which was approved by the Australian Government Department of Industry, Innovation and Science. The Inland Rail AIP Plan summary is available on the Department of Industry, Innovation and Science website:
www.industry.gov.au/industry/IndustryInitiatives/AustralianIndustryParticipation/Pages/PublishedExecutiveSummariesofAIPPlans.aspx
- ARTC continued extensive community consultation along the Inland Rail alignment. In the period from July to September 2016, ARTC held over 80 meetings and community information sessions with individual stakeholders, local councils, and other stakeholder groups.
- The Department of Finance commenced the Market Testing process to identify the potential for private sector involvement in the financing and delivery of Inland Rail.

Rural & Regional Affairs and Transport Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates 2016 - 2017

Infrastructure and Regional Development

Question no.: 202

Program: N/A

Division/Agency: Australian Rail Track Corporation

Topic: Curve Radius

Proof Hansard Page: Written (28 October 2016)

Senator Rice, Janet asked:

Would ARTC be prepared to consider mandating a minimum curve radius of 1200 metres for new track in all terrain, with a preferred minimum curve radius of 2200 metres, in line with Queensland Government track design standards for Gowrie to Grandchester (with a new tunnel under the Toowoomba Range).

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.
- 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.

A copy of the Inland Rail Service Offering in pdf format is attached and available at inlandrail.artc.com.au/service-offering.

The alignment standards provide for a Melbourne-Brisbane terminal-to-terminal transit time of less than 24 hours, consistent with customer needs expressed during the development of the Service Offering, compared with 32-34 hours via the existing Melbourne-Sydney-Brisbane line.

The alignment includes a 6.4 kilometre tunnel under the Toowoomba Range.

Attachments

[Attachment A](#) – Inland Rail Service Offering



Australian Government

BUILDING OUR FUTURE

Attachment A

ARTC

MARCH 2016



InlandRail

SERVICE OFFERING

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 Queensland.

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.



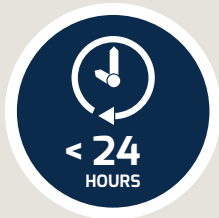

This feedback is reflected in the current service offering, with clear potential for faster and slower services to meet customer needs (while preserving the core offering of a 24 hour transit time from Melbourne to Brisbane), a clearly specified reliability target of 98 percent and clarity around the 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

 <p>Reliability</p>	 <p>Price</p>	 <p>Transit time</p>	 <p>Freight available when the market wants</p>
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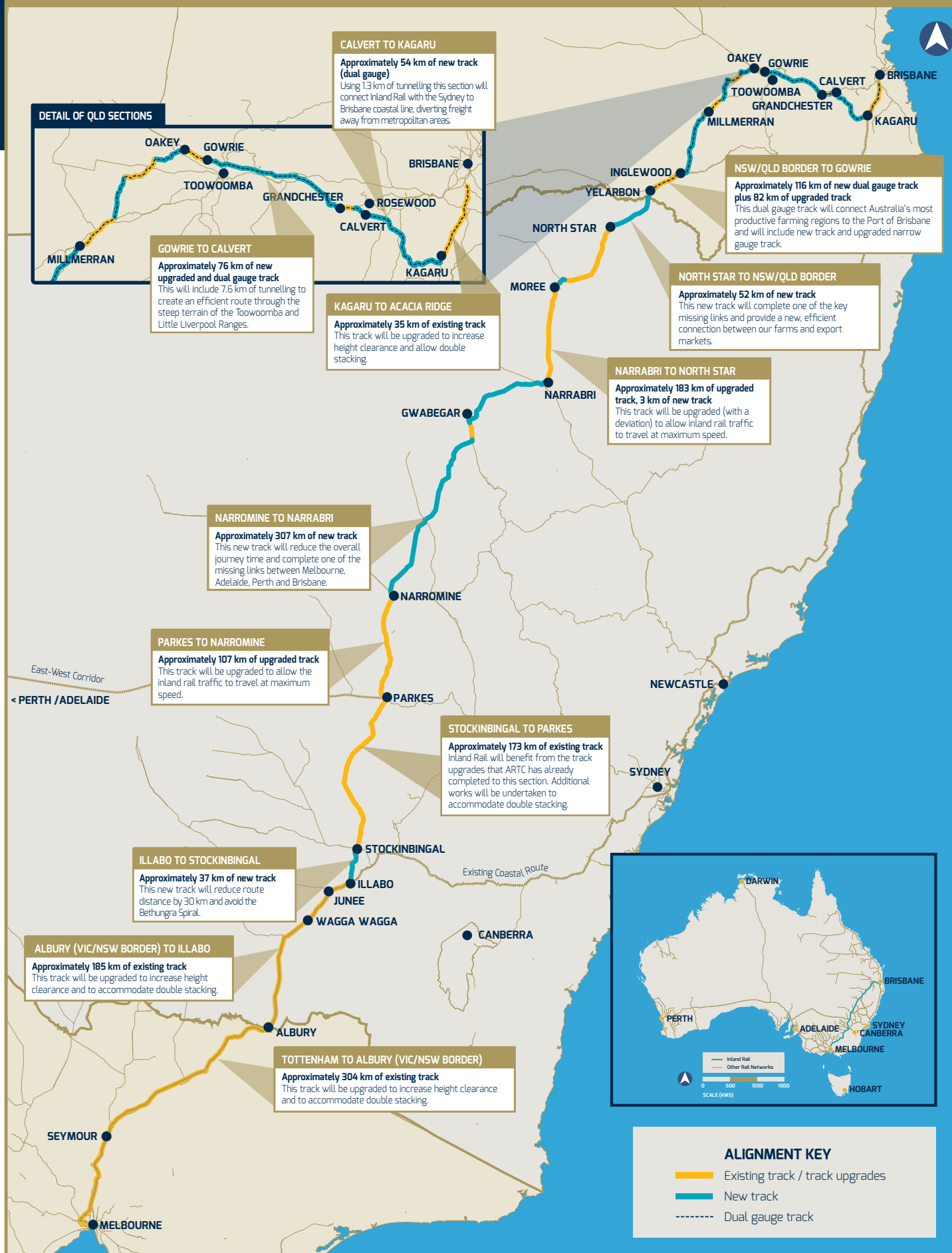
» Inland Rail - Key technical characteristics that underpin the service offering

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	<ul style="list-style-type: none"> • 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 @ 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 (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

INLAND RAIL ALIGNMENT 2016



Rural & Regional Affairs and Transport Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates 2016 - 2017

Infrastructure and Regional Development

Question no.: 203

Program: N/A

Division/Agency: Australian Rail Track Corporation

Topic: Track Standards

Proof Hansard Page: Written (28 October 2016)

Senator Xenophon, Nick asked:

It is noted from your website that “Across five states we manage and maintain an 8,500km rail network. We’ve invested billions of dollars to build, extend and upgrade our network to get freight off the road and onto rail. That’s good for business, motorists, the environment and communities. We work with rail operators to provide access to rail for businesses and producers across Australia”.

- a) Can ARTC advise what involvement it has with respect to track standards?
- b) What do those standards involve – are they specified as an Australian Standard?
- c) Are ARTC responsible for the procurement of track and replacement track?
What requirements do ARTC put on procurement of rail with respect to:
 - a) Value for money (are tax receipts, spill overs etc. taken into consideration)
 - b) Australian Industry Participation, including the source of the raw product?
 - c) What is ARTC forecast with respect to future steel track needs (next 5 years)?

Answer:

- a) ARTC publishes track standards as part of its suite of documents prescribing technical matters in its Safety Management System.
- b) Where possible ARTC draws from Australian Standards published by either Standards Australia (SA) or the Rail Industry Safety and Standards Board (RISSB).
- c) Yes.
 - a) Value for Money is the total long term total cost of rail including costs delivered to site.
 - b) All of ARTC’s rail requirements have been sourced from Arrium Whyalla and we have a supply agreement with them that has provisions in place to ensure we receive value for money. Australian Industry Participation plans are in place for ARTC’s current major projects including the Port Botany rail line upgrade, Adelaide-Tarcoola Re-Railing Upgrade and Inland Rail.
 - c) ARTC requires around 8,000t per annum of steel rail for maintenance requirements across its network. It has also entered into a contract with Arrium for 73,000t of rail for the Adelaide-Tarcoola re-railing upgrade which is being funded through a \$252m equity injection from the Government. Rail will also be needed for the Inland Rail project.



Australian Government

BUILDING OUR FUTURE

Attachment A

ARTC

MARCH 2016



InlandRail

SERVICE OFFERING

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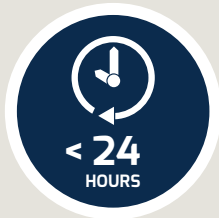

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A ROAD COMPETITIVE OFFERING

 <p>98%</p>			
Reliability	Price	Transit time	Freight available when the market wants

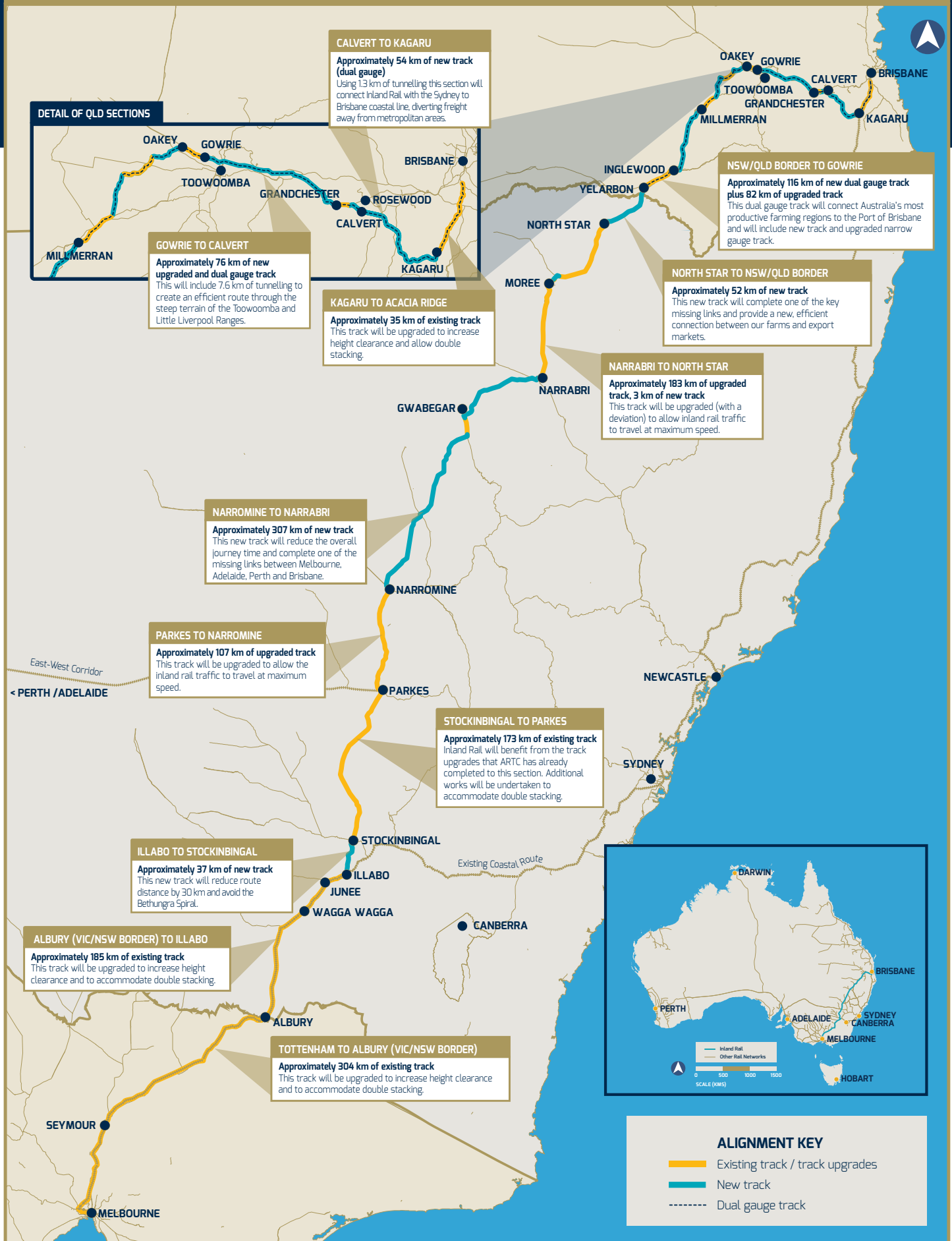
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INLAND RAIL ALIGNMENT 2016



Rural & Regional Affairs and Transport Legislation Committee

ANSWERS TO QUESTIONS ON NOTICE

Supplementary Budget Estimates 2016 - 2017

Infrastructure and Regional Development

Question no.: 207

Program: N/A

Division/Agency: Australian Rail Track Corporation

Topic: Rail Grinding Contract

Proof Hansard Page: Written (27 October 2016)

Senator Sterle, Glenn asked:

Are you familiar with a company called Speno Rail Maintenance Australia Pty Ltd?

- a) And that they do rail grinding work for several States and large mining companies including Rio Tinto?
- b) And that they manufacture their grinding machines in Perth?
- c) Has the ARTC ever contracted with Speno?
- d) Has the ARTC ever sought a tender from Speno?
- e) How many times?
- f) How many times have they been successful?
- g) Has Speno recently tendered for any ARTC work?
- h) How long was the contract/s?
- i) What was the result?
- j) How many responses to the request for tender were there?
- k) Who was successful?
- l) Is the ARTC aware of concerns from Speno that it is not being fairly treated?
- m) What steps has the ARTC taken to address those concerns?
- n) Has the ARTC assured itself that the tenders it calls are being managed with proper oversight as to process?
- o) Is the ARTC certain that its rail grinding contract has delivered value for money as against Speno's offering?

Answer:

Yes.

- a) Yes
- b) Yes
- c) Yes
- d) Yes
- e) Six since 2005
- f) Three
- g) Yes
- h) Two years
- i) They were not the preferred tenderer
- j) Two
- k) The process has not been finalised
- l) Yes
- m) In response to correspondence from Speno, ARTC conducted an independent review of the process.
- n) Yes
- o) Yes