

Senate Committee on Rural and Regional Affairs and Transport References Committee Inquiry Submission

Inquiry into Australia's rail industry

Queensland Department of Transport and Main Roads, 2017

Creative Commons information

© State of Queensland (Department of Transport and Main Roads) 2015



<http://creativecommons.org/licences/by/4.0/>

This work is licensed under a Creative Commons Attribution 4.0 Licence. You are free to copy, communicate and adapt the work, as long as you attribute the authors.

The Queensland Government supports and encourages the dissemination and exchange of information. However, copyright protects this publication. The State of Queensland has no objection to this material being reproduced, made available online or electronically but only if its recognised as the owner of the copyright and this material remains unaltered.



The Queensland Government is committed to providing accessible services to Queenslanders of all cultural and linguistic backgrounds. If you have difficulty understanding this publication and need a translator, please call the Translating and Interpreting Service (TIS National) on 13 14 50 and ask them to telephone the Queensland Department of Transport and Main Roads on 13 74 68.

Disclaimer: While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

Document control options

Departmental approvals

Refer to the appropriate Risk Assessment Tool for relevant reviewer and approver

Date	Name	Position	Action required (Review/endorse/approve)	Due
10/02/2017	Shelley Webb	Manager (Rail Strategy)	Draft	
22/02/2017	Steve Kanowski	Chief Economist and General Manager (Strategic Policy)	Approve	
24/02/2017	Mike Stapleton	Acting Director-General	Endorse	

Contents

Creative Commons information	i
Document control options	ii
Departmental approvals	ii
Contents	iii
Introduction	1
Rail in Queensland	1
Rollingstock manufacture in Queensland	3
Existing fleets	3
New generation rollingstock	3
Regional Employer and activity generator	4
Queensland Charter for Local Content	4
Barriers to growth and improved productivity for domestic needs	5
Narrow gauge network	5
Digital rail workforce	5
Nationally coordinated approach to rail manufacturing standards	5
Other matters	6

Introduction

On 10 January 2017, Dr Jane Thomson, Committee Secretary, Senate Standing Committee on Rural and Regional Affairs and Transport invited the Queensland Department of Transport and Main Roads to make a submission addressing the terms of reference of the inquiry into Australia's rail industry.

The inquiry's Terms of Reference are:

The state of Australia's rail industry and how government procurement, including through the Australian Rail Track Corporation, and other policy levers can improve the value for money, competitiveness, stability of work and capability of the rail manufacturing industry, with specific reference to:

- (a) the importance of the national rail industry as a regional employer and activity generator, and the potential costs of further decline of rail manufacturing on the national and relevant regional economies
- (b) the state of the rail industry, barriers to growth and improved productivity, and the potential of Australia's rail industry as a skills and technology incubator, supplier of domestic rail needs as well as potential exports
- (c) the potential for Australia to benefit from a nationally-coordinated approach to rail manufacturing standards and rail procurement projects given the size of the Australian rail industry
- (d) any other related matters.

Provided below is the Department of Transport and Main Roads' submission to the Standing Committee on these matters.

Rail in Queensland

The rail network in Queensland consists of over 9000km of narrow gauge track running from Brisbane to Cairns and the far northern tablelands via the North Coast Line, the west of the state via three major lines from Townsville to Mount Isa, Rockhampton to Longreach and Brisbane to Quilpie and a number of secondary, branch and coal lines across the state.

Key to the state and national economies is the Central Queensland Coal Network, operated by Aurizon, which comprises a number of rail systems linking coal mines to the ports at Gladstone, Hay Point and Abbott Point. There is also the 100km Interstate Line, standard gauge track running from the New South Wales border to Acacia Ridge in suburban Brisbane. After passing Acacia Ridge this becomes dual gauge track on the south east Queensland network enabling access to the Port of Brisbane and Roma Street passenger station for standard gauge trains.

The rail network in Queensland represents approximately 27 per cent of Australia's 33,000km of rail track. Of this, over 2000km are electrified, including the south east Queensland network and from Brisbane to Emerald in the central west and a number of the Central Queensland Coal systems. This 25kV system is the largest electric powered rail system in Australia.

The network is managed by three railway managers:

- Queensland Rail – south east Queensland network and regional network
- Aurizon – Central Queensland Coal Network
- Australian Rail Track Corporation – Interstate Line.

In addition to the heavy rail networks there is a light rail system operating on the Gold Coast which the Queensland Government continues to develop in partnership with the Australian Government and Gold Coast City Council.

The Queensland Government in particular continues to expand and upgrade the rail network with major projects including:

- Springfield Line, 9.5km dual track passenger line opened to services in December 2013 at a cost of \$475 million
- Redcliffe Peninsula Line, 12km dual track passenger line and the Lawnton to Petrie duplication and connection, which opened to services in October 2016 at a cost of \$988 billion with significant contributions from the Australian Government and Moreton Bay Regional Council
- An ongoing program of duplication projects including the Ferny Grove Line, which was completed in 2012 and the Gold Coast line, which is scheduled for completion in late 2017 at a cost of \$163 million
- Construction of the Gold Coast Light Rail System, the \$1.6 billion, 13km stage 1 from Broadbeach South to Gold Coast University Hospital opened in June 2014. The \$420 million, 7.3km stage 2 is currently under construction, linking stage 1 from the University Hospital to the heavy rail network at Helensvale will open in early 2018, in advance of the April 2018 Commonwealth Games.

The Queensland Government continues to progress the development of Cross River Rail, Queensland's highest priority infrastructure project. Cross River Rail will deliver a 10.2km link from Dutton Park to Bowen Hills including a 5.0km tunnel and 5 stations. The Cross River Rail Delivery Authority was established in December 2016 to deliver this city changing project.

The Queensland Government is also working with the Australian Government and the Australian Rail Track Corporation to progress the development of the Melbourne to Brisbane Inland Rail, and with the private sector to link the Galilee Basin coal deposits with the Abbot Point Coal terminal.

In 2015-16 rail passenger services were utilised by over 51 million urban passenger trips and 320,000 long distance passenger trips, and 6.96 million light rail passenger trips.

The rail freight sector in Queensland is large and diverse. In 2014-15 approximately 220 million tonnes of coal, 8.75 million tonnes of mineral and chemical freight, 2 million tonnes of bulk agricultural freight, 3.6 million tonnes of general and containerised freight and 128,000 head of cattle were moved by rail in Queensland. There is opportunity and capacity for these volumes to significantly increase, with the Department of Transport and Main Roads working with rail operators and industry to develop appropriate policy and pricing triggers to move more freight onto rail.

Rollingstock manufacture in Queensland

Existing fleets

All passenger rollingstock currently in service on the Queensland Rail network has been built in Queensland. This includes both the Citytrain and Traveltrain fleets, the majority of which have been built at the Walkers/Downer EDI facility in Maryborough. The newest of the Citytrain fleet entered service in late 2012. The newest of the Traveltrain fleet entered service in late 2014.

In May 2016, the Queensland Government through Queensland Rail let \$400 million in contracts for the heavy maintenance of the existing fleets to be performed at the Downer EDI facility in Maryborough and the UGL facility in Townsville. These contracts extend over seven years and secure approximately 200 Queensland jobs until 2022.

New generation rollingstock

In 2008, in recognition of the need for greater value for money and innovation in future passenger rollingstock acquisitions, the Queensland Government, through Queensland Rail issued an expression of interest (EOI) for the design and build of rollingstock for the south east Queensland network.

Five consortia responded to the EOI which resulted in the shortlisting of three proponents. The evaluation of the request for proposal (RFP) resulted in the shortlist being reduced to two proponents in December, 2011. Both proponents proposed to manufacture the rollingstock in overseas facilities.

In September 2012, following the March 2012 Queensland election, the principal for the project was transferred from Queensland Rail to the Department of Transport and Main Roads. Both proponents agreed to changing the transaction structure to an Availability Public Private Partnership model and the proposed weighting of the assessment of the proponent Local Industry Participation Plans for rollingstock production to ensure a value for money outcome for the project.

Final Offers were received in mid-2013 and following evaluation a \$6.014 billion, 32 year availability contract was awarded to the Bombardier Transportation led consortium in December 2013. The contract includes the design and build of a maintenance facility at Wulkuraka, west of Ipswich, and the design, build, maintain and availability of 75 six-car train sets, which are being manufactured in India.

Regional Employer and activity generator

Over 12,000 Queenslanders are employed by railway managers and operators across Queensland. This workforce is substantially supplemented by rail projects which provide ongoing business and employment opportunities in planning, design, construction, manufacturing and operation, particularly in the highly-specialised skills of rail civil and other engineering, design, signalling and communications, and power systems.

Rail projects provide an increase in business and employment opportunities during stages of rail projects in Queensland and offer both direct and indirect employment and economic opportunities in infrastructure, development, commercial and private sectors, which contribute to improved confidence the State's economy.

Rail infrastructure projects also provide opportunities to unlock economic potential across the State by improving accessibility between communities and business hubs, improving access to health and education facilities and services.

Given rail projects are most often large-scale, major infrastructure projects, the State Government has opportunities to partner with industry and the private sector in public-private partnerships. This works to strengthen relationships with industry and helps to build confidence in the Queensland economy.

Queensland Charter for Local Content

The Department of Transport and Main Roads is required to adhere to the provisions of the Queensland Charter for Local Content, which aims to provide all businesses with full, fair and reasonable opportunities to tender for Queensland Government procurements.

The New Generation Rollingstock project has been subject to the provisions of the Charter, which was formerly known as the Local Industry Participation Policy and Plan, requirements of the Queensland Government since the release of the RFP in December, 2010.

The New Generation Rollingstock project is proving to be a major employer in south east Queensland providing:

- approximately 500 full-time jobs including:
 - 131 positions for the management, design and commissioning of the NGR trains
 - 215 positions for construction of the Wulkuraka Maintenance Centre
 - 150 ongoing full-time jobs at Wulkuraka Maintenance Centre.
- up to 1500 indirect jobs.

Bombardier Transportation was required to develop and implement a Local Industry Participation Plan. The plan sets targets to ensure local industries are being utilised.

It is the intent of the Queensland Government and the Department of Transport and Main Roads to continue to secure as many Queensland and Australian jobs in the sector as possible.

Barriers to growth and improved productivity for domestic needs

Narrow gauge network

The 9000km rail network Queensland is currently connected to the National rail network by the 100km standard gauge Interstate line.

The narrow gauge and legacy nature of much of the Queensland network means that rollingstock is generally ordered in relatively small numbers, some of which are considered bespoke due to the light axle load limit or tunnel dimensions of particular lines. While track characteristics are subject to upgrade wherever possible at end of life, it is cost-prohibitive to upgrade the network or convert the network to standard gauge for the sake of rollingstock orders.

Opportunities may present in the future for conversion or build to dual or standard gauge subject to operational viability and economic feasibility.

Digital rail workforce

Rail has a comparatively older workforce than many industries and due to its complex nature has been slow in the take up of some technological advances. We are moving into an increasingly technical world where the rail industry needs to rebuild its foundations around recruitment, talent and skills identification and retention, attracting a younger and more diverse workforce, and establishing a more flexible and adaptable culture to build digital capability to ensure the rail industry remains relevant and high functioning in the digital age.

Jobs that have traditionally been manual, such as maintenance, are becoming more automated and technology based. Sixty per cent of train drivers in Australia are aged over 45 years. Maintenance needs assessment is also becoming digital with wayside condition monitoring and other advances already in use in Australia. Robotics, automation and big data are the way of the future, and the broader rail industry and governments need to ensure understanding and progression with industry and customer expectations.

A national perspective and response to identifying and addressing the digital skills agenda for the rail industry will assist in addressing some barriers to growth and improved productivity in both the short and longer term.

Nationally coordinated approach to rail manufacturing standards

The Queensland Government through the Department of Transport and Main Roads is supportive of a nationally coordinated approach to rail manufacturing standards in Australia, and as such are participants in national working groups considering a range of aspects in the development of national standards.

However, from the Queensland perspective, any national standard must take into consideration and be applicable to the narrow gauge environment. Failure to consider the implications of a narrow gauge environment may lead to a situation such as the *Disability*

Standards for Accessible Public Transport 2002, where the standard could be readily applied in a standard gauge environment but a narrow gauge environment was not wide enough to accommodate the required dimensions of the standard.

In addition, consideration needs to be given to the development of a hierarchy of standards. While there is merit in the development of a set of national standards, the rail industry internationally has extensive applicable standards. There is potential for Australian effort to be focussed on the review of international standards for applicability to Australian conditions and for Australian based standards to be developed when international standards do not support Australian conditions.

Other matters

The Queensland Government and the Department of Transport and Main Roads are committed to continuing to work with other jurisdictions and industry to harmonise practice and procedure in the rail industry wherever economically and practically feasible in Queensland. The Department of Transport and Main Roads will continue to represent Queensland interests in national fora, working groups and in delivering the National Rail Agenda.

The harmonisation of Rail Safety is a key issue for Queensland in 2017, with the Department of Transport and Main Roads and the Office of the National Rail Safety Regulator working towards the introduction of legislation transferring the rail safety regulatory function from the State to the Commonwealth.

The Department of Transport and Main Roads is also leading the Queensland Government team working in partnership with the Australian Rail Track Corporation in the development of the Queensland section of Inland Rail. Once detailed design and construction commences the Queensland Government seeks to optimise employment opportunities for Queensland workers and local communities along the alignment.