

Submission to Senate Rural and  
Regional Affairs and Transport  
References Committee Inquiry into  
the State of Australia's Rail  
Industry

Feb 2017

ARTC

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## INTRODUCTION

The Australian Rail Track Corporation (ARTC) appreciates the invitation in January 2017 by the Senate and Rural and Regional Affairs and Transport References Committee for ARTC to make a submission addressing the terms of reference of the Senate Inquiry into Australia's rail industry.

This is of particular importance to ARTC given the reference to the company in the Senate Inquiry's Terms of Reference:

*"State of Australia's rail industry and how 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..."*

ARTC has provided examples within this submission where projects funded by the Australian Government through ARTC can deliver good policy outcomes which support regional communities, improve productivity and capacity in the industry while also supporting the manufacturing industry. ARTC has also provided a response on the state of play – focusing more on the current shape of the industry and providing some opportunities to remove barriers in the industry.

ARTC is supportive of a nationally coordinated approach to manufacturing standards but notes it needs to be flexible to ensure it can be cost effective. This submission also provides additional points, including how technology, such as ARTC's Advanced Train Management System, can make a difference for the industry in the backdrop of innovative advancements in other transport sectors.

A submission from the Freight on Rail Group (FORG) has been provided, which ARTC endorses and supports as a member of the group. The FORG submission provides a rail freight industry perspective where key priorities should be focused and highlights the importance of addressing growth and barriers to the rail freight industry.

This submission will not cover the items discussed in the FORG submission but rather focus more on items specific to ARTC's business.

It should be noted, the Australian Government, through the Transport and Infrastructure Council is progressing a National Rail Vision as well as a National Freight and Supply Chain Strategy (the Strategy). Most of the items focussed in this Senate Inquiry are also covered as part of this National Rail Vision and the Strategy's terms of reference. ARTC suggests it may be useful to cross-analyse any work undertaken as part of this process to ensure that there is no duplication or conflict.

### Australian Rail Track Corporation

ARTC is a Government Business Enterprise as described under section 5(2) of the *Public Governance, Performance and Accountability Act 2013*. It has responsibility for the management of over 8,500 route kilometres of standard gauge interstate track in South Australia, Victoria, Western Australia, Queensland and New South Wales. ARTC also manages the Hunter Valley coal rail network and other regional rail links in New South Wales. The Australian Government is ARTC's sole shareholder.

ARTC plays a critical role in the transport supply chain and in the overall economic development of Australia. ARTC's mandate from Government is to increase the freight volume carried on its network while operating as a sustainable commercial enterprise

## REGIONAL EMPLOYER

ARTC is very proud of our regional footprint and the investment and employment we provide to regional communities across Australia. Our maintenance and construction works for example, directly support regional businesses to the tune of more than \$200 million a year, through everything from using local contract labour, to hire companies, quarries, service stations, local shops, cafes, accommodation and office supplies.

Not only does our investment in the community support local jobs and businesses, we are also ensuring a vital lifeline for many of these communities – the rail line itself – remains safe and continues to be upgraded.

ARTC currently employs over 1,200 people across Australia and a large portion of these work within regional and rural Australia. As members of the community ARTC has participated and supported a number of community and rail safety initiatives through the year and have built local relationships with Councils across our network, recognising the core role they play in the community.

#### Adelaide to Tarcoola Upgrade Acceleration Project

With the help of funding from the Australian Government, ARTC has been able to bring forward a significant package of re-railing upgrade work to improve the capability of the rail line between Adelaide and Tarcoola in South Australia. This project has been assessed by Infrastructure Australia which designed the priority a high priority.

The project involves the upgrade of approximately 600 kilometres of track on the Interstate network between Adelaide (Islington and Outer Harbor) and Tarcoola which supports intermodal freight traffic to and from Western Australia as well as a lot of heavy minerals rail freight. The upgrade will improve capacity by increasing rail size along the interstate line, along with some other works which will allow for higher axle loads.

Importantly, on top of the infrastructure improvements, the project creates and supports a number of jobs in regional South Australia. The project directly supports steel manufacturing with over 70,000 tonnes of Australian-made, Whyalla steel rail to be delivered as part of this project. The project will create 130 direct jobs at ARTC's flashbutt welding facility at Spencer Junction in Port Augusta and in construction and project management jobs to deliver the re-railing itself over the next few years.

This project is an example of how the Australian Government can be an enabler of supporting regional economies through the ARTC, investing in productive infrastructure that will add productivity benefits to the rail freight network. **ARTC notes that with further Government investment there would be opportunities to extend the re-railing project as part of a broader program of works.**

#### Melbourne to Brisbane Inland Rail

Projects like Inland Rail currently on the Australian Government's forward infrastructure agenda will provide benefits to regional communities.

The project will provide a direct 1,700 km rail freight corridor between Melbourne and Brisbane and connect south-east Queensland by rail with Adelaide and Perth. This project is an important strategic investment in Australia's infrastructure capability, providing capacity to serve the east coast freight market for the next half century and will enhance productivity and open up new export markets and employment opportunities for areas of regional and rural Australia.

The majority of the construction and capital expenditure will occur in regional areas. The project is estimated to create up to 16,000 direct jobs during construction, and an average of 600 jobs per year when Inland Rail becomes operational.

The project will provide significant benefits for the industry and will enhance productivity and increase consumer freight chain options.

## **STATE OF PLAY**

To be commercially viable, railways need to achieve significant economies of scale and freight density. Given Australia's low and dispersed population and vast geography, the primary challenge for rail, in particular the non-mining networks, is achieving those economies. Rail is suited to high volume, bulk commodities, generally over long and shorter distances. The nature and strengths of the industry has meant it has traditionally handled the freight market for heavy high-volume products such as agricultural and mining commodities.

Within the provision of non-bulk freight services, rail is generally more suited to longer haul distances. This occurs because of the need to offset the additional handling to facilitate inter-modal operations and the use of 'pick up' and 'delivery' freight movements between rail terminals and customer facilities. It is within this segment particularly that road freight has successfully captured market share from rail over shorter distances. This has largely been realised through the introduction of larger, higher productivity vehicles, which can be accommodated on our national highways following decades of sustained, high value road investment.

Barriers to entry in the freight rail industry are very high with new entrants facing a myriad of challenges, including operating a high fixed cost business, the need for considerable capital outlay, the difficulty of attracting a skilled workforce, a lack of capacity (terminals) and the task of becoming an accredited rail operator. This has traditionally been compounded by complex regulatory requirements that differ across jurisdictions and legislative compliance and access conditions, including route accreditation and audits. If new competitors establish they must maximise services to remain sustainable and given the fragmented end market in non-bulk sectors this can be a lengthy and costly process to achieve. To improve conditions, **ARTC and as members of FORG have advocated governments prioritise measures to encourage efficiency in the rail sector and create a level playing field between rail and road. Equally, opportunities for infrastructure investment to improve rail productivity, especially for short haul rail, need to be considered together with a review of environmental legislation, which differs across jurisdictions.**

**ARTC is strongly supportive of the arguments made in the FORG submission, with specific high priority placed on heavy vehicle road pricing reform, the need for land perseveration and terminal development.** Given these issues are dealt with extensively within the FORG submission ARTC has not covered this topic.

## **NATIONALLY-COORDINATED APPROACH TO RAIL MANUFACTURING STANDARDS**

ARTC is supportive of a nationally coordinated approach to rail manufacturing standards subject to it being based on the principle that it be economically sound, and practically feasible and does not inhibit innovation. ARTC acknowledges the potential safety and efficiency benefits from standardisation and harmonisation of practices.

As indicated in the FORG submission, the rail industry has significantly matured in the last five years and the the establishment of the Office of the National Rail Safety Regulator and the Rail Industry Safety and Standards Board (RISSB) has been important harmonising standards.

Given the current diverse rail operating environments that have arisen due to the separate development of railways in Australia, the industry is adopting a process of progressive reform and standardisation where it is practical and cost effective to do this.

ARTC supports an acceleration of the streamlining of the multiple rules, regulations and legislation applying on the one track from end-to-end. In particular, ARTC supports a review to develop a scope of work to harmonise and streamline Australian freight rail legislation and regulation. Freight rail in Australia includes a substantial component of interstate freight movement, but the ease of these freight movements for above rail operators is often complicated by different state approaches to access, environment and operations.

Also as technological improvements and uptake occurs within the rail industry, effective interoperability in rail must also be considered as part of any national coordinated approach. ARTC would argue that the Australian Government and State Jurisdictions should consider this to ensure that legacy issues faced by the rail industry today (ie around track gauges) does not manifest in a different form because of the adoption of one technology by a company which poses challenges across the supply-chain.

By having a coordinated approach we will ensure operations aren't stifled by incompatible systems causing inefficiencies in the supply chain and extra costs to all users. In order to promote equality of access to

information technology systems, there must be cooperative agreements between jurisdictions and business in the logistics space. Through the application and adoption of common standards, including the harmonisation of guidelines and policies, rail based technological solutions can support an effective connection between rail track owners and operators.

## ANY OTHER MATTERS

### Shaping the Future

The focus by Governments should be on how to help lower the unit cost of rail freight transport and in turn boost greater efficiency and productivity in the sector. Without question, technology will continue to play a key role in improving freight rail efficiencies. The Senate Inquiry would benefit from a focus on the government's role in proactively managing technology implications and impacts to ensure future directions are shaped appropriately, rather than delivered on an ad-hoc basis. Given the increasing role for governments in technology coordination, **ARTC suggests the Senate Inquiry consider the inclusion of a section on how the adoption of technology could lead to better transport outcomes.** In this context, the Inquiry could look at how smart technology can support growth and transform the sector. In recognising the reliance and future dependence on technology in the industry, particularly in a globalised market, the Australian Government should consider ways to better understand the challenges this era will bring and opportunities that can be exploited now to bring forth meaningful change in the future.

Strategies to improve and lift workplace productivity are a priority for the industry and should be supported by government incentives. Achievement in this area could be made through schemes that encourage the development and implementation of innovative processes and systems and in the adoption of new technology, including the trial of emerging technologies.

ARTC's Advanced Train Management System (ATMS) discussed in the box below is an example of government seed funding for a project that has the potential to revolutionise the freight rail industry in the interstate network once in operation. Development of driverless vehicles is growing rapidly and it is plausible that rail will be competing with driverless trucks in the foreseeable future. These productivity developments on the road are taking place against a background of continuous upgrades to the interstate road network. As such, the **Senate Inquiry could also focus on supporting investments in automated rail technology.** This would change rail's service offerings and be cost effective for smaller volumes, by ensuring optimal capacity of tracks and provide additional automatic safety overlays.

To remain competitive, ARTC is developing a new communications based safeworking system, the ATMS, which should be ready to be rolled-out within the next few years. The project has completed the proof of concept phase, and is now in a field trial phase to demonstrate the functionality of the system in a live environment. As part of the Australian Logistics Council's 2016 federal election platform report, ATMS was listed as an example of technology that has the potential to increase efficiency, safety and productivity for the rail sector. The project has also been listed as a priority initiative by Infrastructure Australia on their National Infrastructure Priority List. **ARTC welcomes ATMS being recognised as an important project supporting rail freight in Australia.**

#### Advanced Train Management System

The majority of the interstate network is currently signalled using the CTC system. It is a technology that facilitates efficient operations with goods levels of safety and reliability on ARTC's interstate network, however it is a high cost and highly inflexible.

ARTC has been working on a next generation communication based safe working system since 2002, which has received the ongoing support by the Australian Government, for the Advanced Train Management System project. The project has completed the proof of concept and is now in a field trial phase to demonstrate the functionality of the system in a live environment.

Through government assistance this communications based safe-working system will provide industry with better transport outcomes by improving the capacity of the rail network, enhancing operational flexibility, increasing train service availability, improving transit times and rail safety, and upgrading system reliability.

The increased capacity will result in reduced capital and maintenance costs through the elimination of much of the on-ground infrastructure required under the current system.