

CHAPTER

01

INLAND
RAIL 

Introduction

NORTH STAR TO NSW/QUEENSLAND BORDER ENVIRONMENTAL IMPACT STATEMENT

**ARTC**

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

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1. Introduction

1.1 Overview

The Australian Government has committed to delivering the Inland Rail Program, a significant piece of national transport infrastructure that will improve Australia's existing rail network and serve the interstate freight market.

The Inland Rail route is approximately 1,700 kilometres (km) long and will provide a direct link between Melbourne and Brisbane via regional Victoria, New South Wales (NSW) and Queensland (Figure 1.1). The route uses the existing interstate rail line from Tottenham to Illabo. A combination of new and upgraded rail line will be used via Parkes, Moree, Toowoomba and Calvert to reach the existing interstate rail line at Kagaru, and onto Acacia Ridge and Bromelton, south of Brisbane.



FIGURE 1.1 PROPOSED ALIGNMENT FOR INLAND RAIL

Inland Rail is divided into 13 projects, with seven located in NSW. Each project will undergo environmental assessment and approval under relevant local, state and Commonwealth planning laws, taking into consideration the contribution of each project to the wider Inland Rail Program.

In 2015, the Australian Rail Track Corporation Ltd (ARTC) (the proponent of this Environmental Impact Statement (EIS)) developed a ten-year program to deliver all 13 Inland Rail projects by 2025. ARTC was created in 1997 after the Australian Government and state governments agreed to the formation of a 'one stop shop' for all operators seeking access to the national interstate rail network. Across its network, ARTC is responsible for:

- ▶ Selling access to train operators
- ▶ Developing new business
- ▶ Capital investment in the corridors
- ▶ Managing the network
- ▶ Infrastructure maintenance.

Further information on ARTC and Inland Rail can be found at artc.com.au and inlandrail.com.au, respectively.

1.2 The proposal

ARTC is seeking approval to construct and operate the North Star to NSW/Queensland Border project of Inland Rail (the proposal). The proposal is one of three 'missing link' Inland Rail projects in NSW.

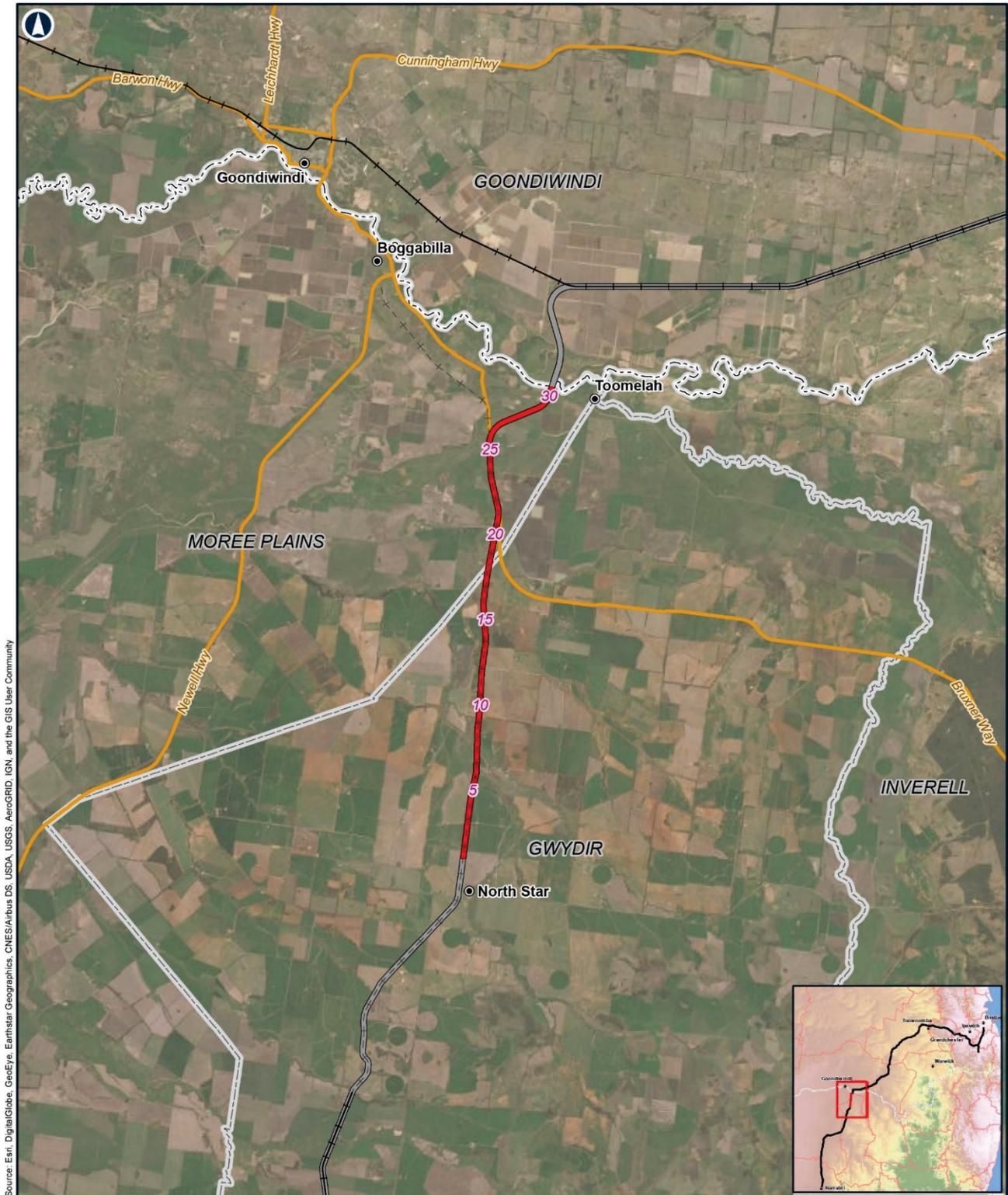
The proposal consists of approximately 30 km of new track and associated facilities between North Star and the NSW/QLD border. For design purposes, the delivery model for the proposal includes a 7 km section of new track north of the NSW/QLD border that ties into the existing Queensland Rail South Western Line near Kurumbul (refer Figure 1.1). For the purpose of obtaining the necessary environmental approvals, this 7 km section of new track will be assessed as part of the Inland Rail—Border to Gowrie project, for which a separate EIS under the *State Development and Public Works Organisation Act 1971* (Qld) (SDPWO Act) is currently being prepared.

1.2.1 Location

From a point approximately 900 m north of North Star, the proposal follows the existing non-operational Boggabilla rail corridor for approximately 25 km towards Whalan Creek. The proposal continues along a 5 km section of greenfield rail corridor towards the NSW/QLD border. The NSW/QLD border is defined by the centre point of the Macintyre River.

The rail corridor for the proposal will have a general width of 40 m with some variation to cater for local topography and certain pieces of infrastructure. The rail corridor will be of sufficient width to encompass all infrastructure currently proposed for construction, as well as possible expansions in the future.

The location of the proposal is shown in Figure 1.2. Further information about the location of the proposal and a description of the proposal site for the purpose of this EIS is found in Chapter 4: Site Description.



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Figure 1.2: Location of the proposal

NORTH STAR TO NSW/QLD BORDER

9km

Coordinate System: GDA 1994 MGA Zone 56
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LEGEND

- Localities
- 5 Chainage (km)
- Existing rail (operational)
- - - Existing rail (non-operational)
- - - NSW/QLD border
- Major roads
- North Star to NSW/QLD border alignment
- Adjoining alignments
- Local Government Areas



The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation, in partnership with the private sector.

Map by: LCT\IGN Z\GIS\GIS_270_NS2B\Tasks\270-EAP-201808241129_project_figures\270_EPA_201808241129_Fig1_LocProp_rev5.mxd Date: 6/02/2020 15:38

FIGURE 1.2 LOCATION OF THE PROPOSAL

1.2.2 Key features

The proposal consists of the following key features:

- ▶ Twenty-five kilometres of new track within the existing non-operational Boggabilla rail corridor
- ▶ Approximately 5 km of new track within a greenfield rail corridor
- ▶ One crossing loop, designed to accommodate trains up to 1,800 m long, with provisions to accommodate trains up to 3,600 m long, if required, in the future
- ▶ Eleven new bridges, including an approximately 1.8 km long viaduct over the Macintyre River and Whalan Creek, major watercourses. The viaduct is located in both NSW and Queensland; therefore, it will be assessed under the NSW *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act) by this EIS, and under the *State Development and Public Works Organisation Act 1971* (QLD) (SDPWO Act) by the NSW/Qld Border to Gowrie EIS
- ▶ Earthworks, drainage works and road works
- ▶ Level crossing works
- ▶ Ancillary infrastructure, including signalling and communications infrastructure, signage, fencing and utilities.

The construction phase of the proposal will also involve laydown areas, access tracks, borrow pits and workforce accommodation.

A detailed description of the proposal ARTC is seeking approval for through this EIS, is in Chapter 6: The Proposal and Chapter 7: Construction of the Proposal.

1.2.3 Timing and operation

Subject to approval of the proposal, construction is planned to occur between 2021 and 2025 and will be managed and maintained by ARTC; however, train services will be provided by a variety of operators. Train services are not expected to commence until all 13 sections of Inland Rail are complete, planned for 2025.

The proposal will be trafficked by an estimated 14 trains per day in 2025, increasing to an estimated 21 trains per day in 2040. Annual freight tonnages will increase in parallel, from approximately 12 million tonnes per year in 2025 to 20 million tonnes per year in 2040.

The proposal is designed to support double-stacked, 21–25 tonne axle load intermodal (i.e. container) trains up to 1,800 m long and 6.5 m high. Depending on the tonne axle load, train speeds will vary between 80 kilometres per hour (km/hr) and 115 km/hr. In addition, the proposal footprint is future-proofed to accommodate 30-tonne axle load intermodal trains up to 3,600 m long and 6.5 m high, travelling at 80 km/hr.

Further information on the timing and operation of the proposal is provided in Chapter 6: The Proposal and Chapter 7: Construction of the Proposal.

1.3 Objectives of the proposal and Inland Rail

The objectives of the proposal are to:

- ▶ Enable trains using the wider Inland Rail network to travel between North Star and the NSW/QLD border, linking with other sections of the wider Inland Rail network to the north and south
- ▶ Provide new rail infrastructure that meets Inland Rail specifications, which includes improving flood resilience of the rail corridor
- ▶ Minimise potential environmental and community impacts by maximising use of the existing non-operation Boggabilla rail corridor.

The four key elements of the Inland Rail 'service offering' are 98 per cent reliability, road-competitive pricing, less than 24 hours' transit time between Melbourne and Brisbane and freight availability in line with market needs. In conjunction with the Inland Rail service offering, the objectives of Inland Rail are to:

- ▶ Provide a backbone rail link between Melbourne and Brisbane that is interoperable with train operations between Perth and Adelaide to serve future rail freight demand and stimulate growth for inter-capital and regional/bulk rail freight
- ▶ Provide increased productivity that will benefit consumers through lower freight transport costs
- ▶ Provide a step-change improvement in rail service quality in the Melbourne to Brisbane corridor to deliver a freight rail service on the east coast that is competitive with road
- ▶ Improve road safety, ease congestion and reduce environmental impacts by moving freight from road to rail
- ▶ Bypass bottlenecks on the congested metropolitan rail networks on the east coast and free up train paths for other services on the coastal route
- ▶ Act as an enabler for regional economic development along the Inland Rail corridor.

1.4 Environmental Impact Statement purpose and structure

This EIS supports an application for approval of the proposal under Part 5 Division 5.2 of the EP&A Act. It addresses the Secretary of the Department of Planning, Industry and Environment's environmental assessment requests (the SEARs), dated 8 August 2018 (the SEARs are included in Appendix A: Basis of Assessment Technical Report).

The proposal is also a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and requires approval from the Australian Government Minister for the Environment. The EPBC Act assessment requirements are detailed in Attachment A of the SEARs.

The EIS is structured in three volumes. Volume 1 consists of three parts:

- ▶ Part A: Introduction:
 - ▶ An introduction to the environmental assessment (Chapter 1: Introduction)
 - ▶ An overview of the strategic context and need for the proposal (Chapter 2: Strategic Context)
 - ▶ A summary of the alternatives to the proposal as a whole and the options considered during development of the concept design for the proposal (Chapter 3: Alternatives and Proposal Options)
 - ▶ A description of the general biophysical and socio-economic environment within which the proposal would be located, including the regional setting and a description of the proposal site (Chapter 4: Site Description)
 - ▶ An overview of the statutory context for the proposal and the approval requirements (refer Chapter 5: Planning and Assessment Process)
- ▶ Part B: The Proposal:
 - ▶ A description of the proposal features and operation (Chapter 6: The Proposal), including the approach to avoiding or minimising impacts, design features and infrastructure proposed, operation, maintenance, and other related information
 - ▶ An indicative description of the likely construction process and activities (Chapter 7: Construction of the Proposal)
 - ▶ A summary of the consultation undertaken during the proposal development and environmental assessment process, and the consultation proposed during public exhibition, detailed design, and delivery (Chapter 8: Consultation)
 - ▶ An outline of the methodologies used to assess key environmental issues (Chapter 10: Assessment Methodology)
- ▶ Part C: Environmental Assessment:
 - ▶ Technical environmental assessments
 - ▶ An environmental management plan for the proposal, including a consolidated summary of potential impacts and associated mitigation measures (Chapter 27: Environmental Management Plan)
 - ▶ Conclusion and justification for the proposal (Chapter 28: Conclusions).

The specialist technical reports prepared as an input to the EIS are provided in Volumes 2 and 3.