

Decision notice

Transitional arrangements for Aurizon Network to address existing capacity deficits

21 September 2023

In accordance with cl. 7A.5 of Aurizon Network's 2017 access undertaking (UT5), we are to make determinations in relation to the transitional arrangements, including options for expansions, that will most efficiently and effectively address existing capacity deficits identified in the respective systems across the central Queensland coal network (CQCN).¹

Prior to determining which transitional arrangements will most efficiently and effectively resolve the existing capacity deficits, we may determine that an expansion study² be undertaken into a potential expansion identified by the independent expert as a potential transitional arrangement.³

We determine that it is appropriate for Aurizon Network to proceed with undertaking a concept study in relation to the following transitional arrangements:

- NG3: Collinsville passing loop extension (day-time operation)
- NG4: Collinsville passing loop 24-hour operations
- NG5: Coral Creek passing loop.

Based on the information available, we consider that these transitional arrangements may form part of the most efficient and effective solution for resolving the existing capacity deficits identified in the Newlands and GAPE systems. However, further information is required in order to better understand the capacity benefits, costs and risks associated with these transitional arrangements. Undertaking a concept study will enable Aurizon Network to develop detailed costings and scopes of work for further consideration.

This is our third determination in relation to the progression of transitional arrangements. We will make further determinations as to those transitional arrangements that are appropriate to progress, or implement, to address the existing capacity deficits identified in each system, as required.

Background

The process for identifying and resolving existing capacity deficits across the CQCN is outlined in Part 7A of UT5.⁴

To date, a number of steps have been undertaken by Aurizon Network and the independent expert⁵ to assess capacity deficits and identify the most efficient and effective transitional arrangements to resolve those deficits (Figure 1). In accordance with this process, Aurizon Network and the independent expert

¹ UT5, cl. 7A.5.

² Being a concept study, pre-feasibility study or feasibility study.

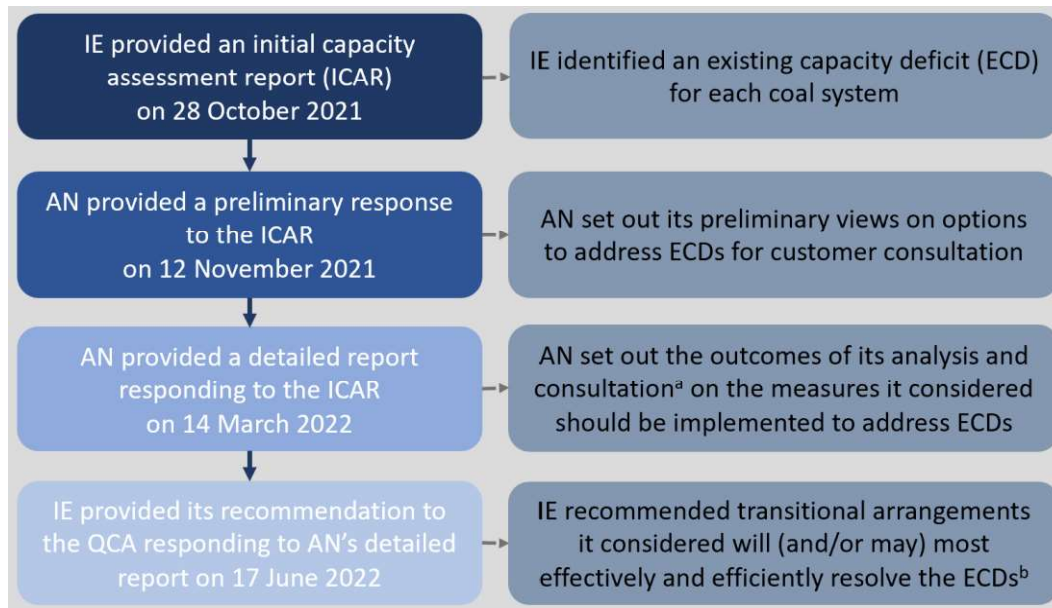
³ UT5, cl. 7A.5(k).

⁴ In March 2023, we approved amendments to the UT5 process for identifying and resolving capacity deficits that, amongst other things, provided for the staged implementation of transitional arrangements and for additional information to be sought, and taken into consideration, when determining the transitional arrangements to be implemented. QCA, *Aurizon Network's Resubmitted Concept Study DAAU—final decision*, decision notice, March 2023.

⁵ The Coal Network Capacity Company has been established as the independent expert.

identified that capacity deficits exist in each system and considered, in consultation with industry, possible ways to resolve them.

Figure 1 Process undertaken to assess capacity deficits and transitional arrangements



Note: a Aurizon Network advised that it had received varying degrees of customer support for its recommended transitional arrangements to address the existing capacity deficits identified. However, Aurizon Network and affected end users had not reached an agreement as to which of the transitional arrangements should be implemented. b The independent expert provided us with its recommendations on the most efficient and effective way to resolve identified capacity deficits, based on modelled capacity benefits and having regard to the estimated costs associated with the various transitional arrangements.

We have made two earlier determinations in relation to a number of transitional arrangements⁶ to be progressed by Aurizon Network in each system.⁷ Some transitional arrangements were to be implemented immediately, while others were to be implemented in a staged approach (including where further work or analysis is required). The list of all transitional arrangements that we have determined be progressed is provided in Appendix A.

Our approach

Broadly, we are to determine those transitional arrangements that we consider may form part of the most efficient and effective solution for resolving existing capacity deficits identified across the CQCN.⁸ This involves identifying transitional arrangements that:

- result in a capacity benefit that goes toward addressing an identified existing capacity deficit
- form part of the overall solution for resolving the existing capacity deficit at the lowest net present cost to access holders, without prejudice to the reliability and performance (in the long and short term) of the rail infrastructure.

Our recommendations are made in accordance with UT5 and are directly informed by the analysis and recommendations provided by Aurizon Network and the independent expert as part of this process.

⁶ The types of transitional arrangements for consideration are defined in Part 12 of UT5.

⁷ See QCA, *Transitional arrangements for Aurizon Network to address existing capacity deficits: Determination*, decision notice, November 2022; QCA, *Transitional arrangements for Aurizon Network to address existing capacity deficits: Determination*, decision notice, April 2023.

⁸ UT5, cl. 7A.5(j).

In this regard, we rely on the capacity modelling outputs and cost estimates produced by Aurizon Network and the independent expert to assess the likely capacity benefits and implementation costs associated with each of the transitional arrangements. This includes where Aurizon Network or the independent expert consider that further information is required in order to better understand the expected capacity benefits, costs and risks. We consider Aurizon Network and the independent expert are best placed to provide guidance on these matters.⁹

Our determinations must be consistent with the system operating parameters, unless required to accommodate an operational change we deem to be prudent for the purpose of rectifying the existing capacity deficit.¹⁰

Determination for the Newlands and GAPE systems

The independent expert identified an existing capacity deficit for the Newlands and GAPE mainline and branchline paths — and recommended a range of transitional arrangements for our approval.¹¹

We have already determined that installing remote-control signalling (NG1) and better utilising the ballast cleaning machine (NG2) will form part of the most efficient and effective solution for resolving existing capacity deficits identified across both systems.¹²

We also determined that the Collinsville passing loop extension transitional arrangement (NG3) may form part of the most efficient and effective solution for resolving the existing capacity deficit identified in the Newlands and GAPE systems. However, Aurizon Network was to confirm that a reduced handling allowance associated with this transitional arrangement would be acceptable to above-rail operators before proceeding with its implementation.¹³

After Aurizon Network engaged with operators, it notified us that there is a high likelihood the costs associated with increasing the Collinsville passing loop length would exceed its initial cost estimate and/or not deliver the expected capacity benefit.¹⁴ As such, Aurizon Network did not proceed with the implementation of this transitional arrangement.

Concept study to consider passing loops for Newlands and GAPE systems

Based on Aurizon Network's initial cost estimates and the expected capacity created¹⁵, we consider that the following transitional arrangements may form part of the overall solution for resolving the existing capacity deficit at the lowest net present cost to access holders:

- NG3: Collinsville passing loop extension (day-time operation)
- NG4: Collinsville passing loop 24-hour operations
- NG5: Coral Creek passing loop.

⁹ The independent expert's analysis is informed by Aurizon Network's cost forecast for each of the proposed transitional arrangements. However, the independent expert has separately modelled the capacity benefits of each of the transitional arrangements, adopting its own assumptions.

¹⁰ UT5, cl. 7A.5(j).

¹¹ Coal Network Capacity Co, *Central Queensland Coal Network: Initial Capacity Assessment Report*, October 2021, pp. 28–29, 39–40; Coal Network Capacity Co, *Central Queensland Coal Network: Annual Capacity Assessment Report*, 2023, pp. 12–15.

¹² QCA, *Transitional arrangements for Aurizon Network to address existing capacity deficits: Determination*, decision notice, November 2022, pp. 3–5.

¹³ Where this outcome is not acceptable, Aurizon Network identified that further civil works would be required to lengthen the loop further—Aurizon Network, *Detailed response to the Initial Capacity Assessment Report*, March 2022, p. 54.

¹⁴ Aurizon Network, *Newlands Transitional Arrangement Concept Study Scope*, correspondence dated 28 July 2023.

¹⁵ Aurizon Network, *Detailed response to the Initial Capacity Assessment Report*, March 2022, pp. 18–20.

The independent expert verified the initial estimate of expected capacity created from these individual transitional arrangements in its CQCN model output.¹⁶

However, both Aurizon Network and the independent expert recommended that further expansion studies be undertaken to establish which of these options should be implemented to address the identified existing capacity deficit.¹⁷ In this regard, the independent expert noted that there are multiple options for implementing passing loops for the Newlands and GAPE systems to address the existing capacity deficit, with all options having interdependencies and potential duplication of costs.¹⁸

We consider that further information is required on the capacity benefits, costs and risks associated with the multiple options for implementing passing loop solutions in the Newlands and GAPE systems to address the existing capacity deficit. Having more information will enable us to determine the transitional arrangements that will form part of the overall solution for resolving the existing capacity deficit at the lowest net present cost to access holders.

Aurizon Network proposed a scope of works for a concept study to identify a suitable location to cross trains between the Almoola to Birralelee section of the Newlands system, which assesses:

- the Collinsville passing loop extension
- the Collinsville passing loop 24-hour operations
- alternative Coral Creek passing loop locations between Pelican Creek and Coral Creek.¹⁹

Aurizon Network provided an indicative cost (\$185 000) and a 6-month timeframe, to undertake this scope of works.²⁰

The independent expert endorsed Aurizon Network's proposed scope of works for the concept study.²¹

We consider it appropriate for Aurizon Network to undertake the proposed concept study to better understand the capacity benefits, costs and risks associated with implementing these transitional arrangements.

Next steps

In accordance with clause 7A.5(r) of UT5, Aurizon Network must comply with this determination, including by doing everything reasonably necessary to implement the transitional arrangements outlined in this determination, as soon as reasonably practicable.

Aurizon Network is able to recover the prudent and efficient costs of undertaking an expansion study in accordance with clause 7A.5(l) of UT5, where we make a determination that a concept study is to be undertaken into a proposed expansion solution to an existing capacity deficit.

After Aurizon Network has undertaken a concept study in accordance with cl. 7A.5(n) of UT5, it is to provide the independent expert with a supplementary detailed report, making a recommendation as to which

¹⁶ Coal Network Capacity Co, *Independent Expert Recommendations to Queensland Competition Authority*, June 2022.

¹⁷ See Aurizon Network, *Detailed response to the Initial Capacity Assessment Report*, March 2022, pp. 18-20; and Coal Network Capacity Co, *Independent Expert Recommendations to Queensland Competition Authority*, June 2022, p. 20-22.

¹⁸ Coal Network Capacity Co, *Independent Expert Recommendations to Queensland Competition Authority*, June 2022, p. 20.

¹⁹ Aurizon Network, *Concept study proposal: Newlands and GAPE transitional arrangements*, August 2023, pp. 2, 9.

²⁰ Aurizon Network, *Concept study proposal: Newlands and GAPE transitional arrangements*, 11 August 2023.

²¹ Coal Network Capacity Co, *Newlands Transitional Arrangement Concept Study Scope*, correspondence dated 31 August 2023.

transitional arrangement(s) should proceed to be implemented to address any remaining existing capacity deficit.

We will make further determinations on the remaining transitional arrangements that Aurizon Network is to implement to resolve the existing capacity deficits in each system, as required.

APPENDIX A TRANSITIONAL ARRANGEMENTS TO BE PROGRESSED

Table 1 QCA determination on transitional arrangements to be progressed by Aurizon Network

<i>Transitional arrangement</i>	<i>Estimated capacity created</i>	<i>Determination</i>		
		<i>Immediate implementation</i>	<i>Staged implementation</i>	<i>Expansion study</i>
<i>Newlands and Gape systems</i>				
NG1: Installation of remote-control signalling	832 train paths	☑		
NG2: Change operation of ballast cleaning machine program	30 train paths	☑		
NG3: Extend the Collinsville passing loop	238 train paths			☑
NG4: Collinsville passing loop 24-hour operations	223 train paths			☑
NG5: Coral Creek passing loop	416 train paths			☑
<i>Goonyella system</i>				
G1: Change to operation of ballast cleaning machine program	250 train paths	☑		
G2: Jilalan yard scheduling improvements	110 train paths	☑		
G3: Connors Range headway reduction	160 train paths	☑		
G5: Additional holding road at Jilalan	242 train paths			☑
IE-G7: Installing crossovers between Jilalan and Wotonga	451 train paths		☑	
<i>Blackwater and Moura system</i>				
Relinquishments	372 train paths	☑		
BM1: Change to operation of ballast cleaning machine program	25 train paths	☑		
BM2: Callemondah yard scheduling improvements	172 train paths	☑		
BM3: Additional holding road at Callemondah yard	246 train paths			☑
BM4: Move provisioning out of Callemondah	123 train paths			☑

Source: QCA, *Transitional arrangements for Aurizon Network to address existing capacity deficits: Determination, decision notice, November 2022*; QCA, *Transitional arrangements for Aurizon Network to address existing capacity deficits: Determination, decision notice, April 2023*.