

**OFFICAL****EC22-001288****Australian Government****Department of Infrastructure, Transport,  
Regional Development, Communications and the Arts****To: Jim Betts****cc: David Hallinan - Deputy Secretary Infrastructure****cc: Jessica Hall – First Assistant Secretary - Major Transport Projects & Infrastructure****MEETING: Presentation from Australian Rail Track Corporation (ARTC) - Background and Current Status of the Advanced Train Management System (ATMS)****Timing:** For meeting on 19 December 2022, 11am to 12 noon**Venue:** Executive Boardroom Level 6 West - 111 Alinga Street**Recommendations:**

1. That you **Note** the briefing

**Noted / Please Discuss****Jim Betts**

Date:

**Comments:****Meeting with:**

Mark Campbell – ARTC – CEO and Managing Director, Brad Moorhouse – Group Executive – Systems and Engineering, and relevant Departmental Officials.

**What do the attendees want:**

To provide up to date relevant information on ATMS, interoperability with the European Train Control System (ETCS) and proposed next steps.

**What does the department want:**

To gain a greater appreciation of the ATMS system, the status of interoperability of ATMS with ETCS and an understanding of what would be required to achieve a broader rollout.

**Key Points:***ATMS Current Status and Funding*

1. Stage One works for ATMS (from Whyalla to Port Augusta) were commissioned in late 2020 (approximately four years later than originally planned due to unforeseen complexities with software development). Stage Two works (from Tarcoola to Kalgoorlie) are expected to be completed by early 2024 however there are some indications this date may be under pressure (again due to potential complexities with software development specific to the Stage Two corridor). Stage Three works (planning for the remaining Melbourne/Parkes to Perth corridor, purchase of at least 470 trainborne

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units, and completion of a Business Case for the broader rollout) are on schedule for completion by early 2024.

2. The Government has committed \$50 million towards Stages One and Two, \$220 million for Stage Three, and \$227 million for the Inland Rail stages (via the Inland Rail funding envelope and subject to change following the Inland Rail review). ARTC has committed \$73.567 million in co-contributions towards Stages One and Two, and \$20 million for Stage Three.
3. Recently, however, ARTC have reconsidered the approach around funding remaining stages of the ATMS rollout and are not likely to seek any funding prior to MYEFO 2023 or Budget 2024, this has become necessary due to:
  - a. The ongoing process for ARTC to engage a new technology partner (see below);
  - b. A temporary shift in ARTC's focus and resourcing to the Inland Rail review as well as the resilience of the interstate network (in response to recent flooding events); and
  - c. The potential reallocation of funds committed to Stage Three which is being explored by ARTC to expedite completion of Stage Two, to allow it to present a proven product which is operational on a line comparable to others on the interstate network.
4. ARTC and consulting firm EGIS are also conducting a broad review into comparable signalling technologies, with findings expected to be available by late February early March 2022.
5. The review will assess other available and emerging signalling systems compared to ATMS based on their safety, efficiency, cost and ease of implementation in the Australian rail system.
6. The review will also examine ARTC's capability to deliver ATMS Stage Two (Tarcoola to Kalgoorlie) by early 2024. Stage Two is critical as it represents the first wide area rollout of the system and as such would be intended to prove that ATMS is fit for purpose.

Interoperability with ETCS

7. The National Transport Commission (NTC) has developed a Nation Rail Action Plan to maximise the benefits from the record investment in rail and overcome the legacy of different rail gauges, trains and signalling. The plan includes an Interoperability Framework that addresses divergent signalling systems.
8. s47B(a), s47B(b)
9. s47B(a), s47B(b)
10. s47G(1)(a), s47C
11. We understand that ETCS could provide comparative benefits, however it requires expensive in track sensors at frequent intervals, dedicated trackside radio equipment and more expensive in cabin equipment. s47(1)(b)

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Technology Partner

12. ARTC has developed ATMS to its current form in partnership with technology supplier Lockheed Martin (LM). However, in mid-2022 LM advised ARTC they wish to withdraw from their rail business activities in Australia.
13. ARTC has now s47G(1)(a) commenced market testing in the throughout the 2022 calendar year with a view to engaging a new technology partner in early 2023.
14. s47G(1)(a)

**Stakeholder Implications:**

15. A modern digital train control system capable of monitoring and controlling trains in real time is critical for the freight rail industry as it will provide productivity gains that will help it compete with other modes, help meet Australia's growing freight task and provide major safety benefits.

16. s47B(a), s47B(b)

17.

**Sensitive and Critical Information:**

18. s47G(1)(b), s47C

19. s47G(1)(b), s47C

It should be noted that nowhere in the world has successfully implemented such a solution and that best estimates are that such a solution will not be rolled out in Europe for at least another decade.

Name: Joanna Piva  
 Position: Assistant Secretary  
 Division: Major Transport Infrastructure Projects  
 Ph: s22(1)(a)(ii)  
 Mob: s22(1)(a)(ii)  
 Date:

Contact Officer: s22(1)(a)(ii)  
 Section: ARTC Projects  
 Ph: s22(1)(a)(ii)  
 Mob: s22(1)(a)(ii)

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EC23-004245


**Australian Government**
**Department of Infrastructure, Transport,  
Regional Development, Communications and the Arts**
**To: Jim Betts** (for noting)

**cc:** Marisa Purvis-Smith; Andrew Madsen

**MEETING: EY Draft Proposal for Interoperability of Train Control Systems (TCS) (Gillian Miles)**
**Timing:** For meeting on Thursday 6 April at 10:00am

**Venue:** Teams

**Meeting with:** Dr Gillian Miles, Chief Executive Officer and Commissioner, National Transport Commission (NTC); s22(1)(a)(ii), Partner, EY; Neil Scales OBE, Director General, Department of Transport and Main Roads (QLD); Rod Sharp, Secretary, Transport for NSW (NSW); Paul Younis, Secretary, Department of Transport and Planning (VIC); Jon Whelan, Chief Executive, Department for Infrastructure and Transport (SA); Sandra McKay, Executive Leader, Facilitated Reform, NTC.

**What do the attendees want:**

The NTC and EY want to provide an update on the outcomes of the business case undertaken by EY and discuss next steps for the eastern seaboard train signalling interoperability. Jurisdictions want to learn about the EY proposal.

**What does the department want:**

To learn about the EY proposal on technology solutions for interoperability of train signalling systems.

**Key Points:**

1. In December 2022, the Infrastructure and Transport Ministers' Meeting (ITMM) agreed the top five priority areas for rail interoperability:
  - a. Identifying the best mechanism for codifying a small number of critical national standards and complementary rules to make all rail more competitive;
  - b. Aligning train control and signalling technology on the eastern seaboard;
  - c. Reducing the burden on drivers, crew and maintenance workers;
  - d. Streamlining rollingstock approval regimes; and,
  - e. Identifying the national and international pathways for digital train control skills required in Australia in the next five years.
2. **The National Transport Commission (NTC) engaged EY** to provide analysis and recommend the way forward to improve interoperability of train signalling systems on the eastern seaboard.
  - a. EY's report has not yet been shared with the department.
  - b. We understand the key focus of EY's work is the interoperability of the Advanced Train Management System (ATMS) and the European Train Control System (ETCS).

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- i. ATMS is designed for predominantly rural freight conditions and in the processes of being rolled by the Australian Rail Track Corporation (ARTC) on the National Freight Network. ETCS has been customised and rolled out by some states for urban passenger networks.
  - c. Based on the advice from ARTC, the systems are at least theoretically interoperable. ARTC and Transport for NSW continue to work collaboratively on the solution – a project justification on this solution is expected to be finalised in the coming months.
  - d. s47G(1)(a)
3. s47B(a), s47B(b)
4. s47G(1)(a)
5. The NTC also proposes to develop a framework for funding the cost of interoperability, recognising the benefits and costs of ensuring the individual networks will be interoperable.
6. The NTC has committed to developing a National Rail Signalling Strategy to ensure future technology deployed for signalling and train control is interoperable.
7. s47B(a), s47B(b)
- 8.

**Stakeholder Implications:**

It is anticipated the draft EY business case will have significant implications for the Commonwealth and the states present in the meeting. Improving interoperability of the rail sector is a National Cabinet and Ministerial priority. Industry also considers improving interoperability to be a priority of the rail sector.

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**Sensitive and Critical Information:**

9. Nil.

Name: Paula Stagg	Contact Officer: s22(1)(a)(ii)
Position: Assistant Secretary	Section: Rail Policy
Division: Surface Transport Emissions and Policy	Mob: s22(1)(a)(ii)
Ph: s22(1)(a)(ii)	
Mob: s22(1)(a)(ii)	
Date: 3 April 2023	

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EC24-000928


**Australian Government**
**Department of Infrastructure, Transport,  
Regional Development, Communications and the Arts**
**To: Jim Betts** (for noting)

**cc:** Marisa Purvis-Smith; Jessica Hall; Paula Stagg; Greg Cox; Sally Todd

**MEETING: Eastern Seaboard Secretaries meeting on Rail Technology Pathway**
**Timing:** For meeting on Monday 3 June 2024 at 4pm.

**Venue:** Microsoft Teams

**Recommendations:**

1. That you **note** the contents of this brief.

**Noted / Please Discuss**
**Jim Betts**
**Date:**
**Comments:**

**Meeting with (External):** Carolyn Walsh, Chair National Transport Commission (NTC), Michael Hopkins, Chief Executive Officer and Commissioner (NTC); s22(1)(a)(ii), Partner, EY; Wayne Johnson, Chief Executive Officer and Managing Director, Australian Rail Track Corporation (ARTC); Sally Stannard, Director-General, Department of Transport and Main Roads (QLD); Josh Murray, Secretary, Transport for NSW (NSW); Paul Younis, Secretary, Department of Transport and Planning (VIC); Jon Whelan, Chief Executive, Department for Infrastructure and Transport (SA).

**Department Attendees (Internal):** Jessica Hall; Paula Stagg; Jason Preece.

**Prior meetings:** You previously met on 6 April 2023 and 11 April 2024.

**What do the attendees want:** s47B(a)

**What does the department want:** s47B(a)

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**Key Points:**


1. The ARTC's Advanced Train Management System (ATMS) and the European Train Control System (ETCS), used by several eastern seaboard jurisdictions are incompatible.
2. NSW, Victoria and Queensland are currently introducing variants of ETCS across their networks. NSW is due to come online first, with a roll out of ETCS Level 2 s47B(a) .
3. ARTC are using independent suppliers to conduct an Independent Due Diligence Review on modern digital signalling solutions including ETCS, evolved ATMS and Positive Train Control system (PTC).

4. s47G(1)(a)



5.

6. s47B(a)



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s47B(a)

7. The NTC proposes to complement the work of ARTC to progress the development of a business case once a preferred technology solution is known in a more programmatic way, and will come back to the department with some options for how they might do this (e.g. through an assurance role to support jurisdiction engagement). s47B(a)

s47B(a)

8. s47B(a)

9.

#### Stakeholder Implications:

10. It is anticipated the alignment of train control signalling technology will have significant implications for governments. Improving interoperability of the rail sector is a National Cabinet and ministerial priority.

11. s47G(1)(a)

#### Sensitive and Critical Information:

12. Nil.

Name: Jason Preece  
 Position: Assistant Secretary  
 Division: Commonwealth Infrastructure Projects  
 Division  
 Ph: s22(1)(a)(ii)  
 Mob: s22(1)(a)(ii)  
 Date: 30/05/2024

Contact Officer: s22(1)(a)(ii)  
 Section: ARTC Engagement & Strategy  
 Mob: s22(1)(a)(ii)

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EC24-000641



## Australian Government

Department of Infrastructure, Transport,  
Regional Development, Communications and the Arts

**To:** Jim Betts (for noting)

**cc:** Marisa Purvis-Smith; Paula Stagg

### **MEETING: Eastern Seaboard Secretaries Meeting on Rail Technology Pathway**

**Timing:** For meeting on Thursday 11 April 2024 at 1:00pm.

**Venue:** Transport for New South Wales office, 231 Elizabeth Street, Sydney.

**Meeting with:** Michael Hopkins, Chief Executive Officer and Commissioner, National Transport Commission (NTC); Carolyn Walsh, Chair, NTC; s22(1)(a)(ii), Partner, EY; Sally Stannard, Director-General, Department of Transport and Main Roads (QLD); Josh Murray, Secretary, Transport for NSW (NSW); Paul Younis, Secretary, Department of Transport and Planning (VIC); Jon Whelan, Chief Executive, Department for Infrastructure and Transport (SA); Marisa Purvis-Smith; Paula Stagg; Jason Preece.

**What do the attendees want:** s47B(a)

**What does the department want:** The department wants to further understand the outcome of the business case and find an interoperable solution between train control and signalling technology on the eastern seaboard.

### **Key Points:**

1. In December 2022, the Infrastructure and Transport Ministers' Meeting (ITMM) agreed the top priorities for rail interoperability, including aligning train control and signalling technology on the eastern seaboard.
2. It is well understood that the European Train Control System (ETCS) and ARTC's Advanced Train Management System (ATMS) are incompatible. In the absence of a technology solution, safety issues will arise as trains traverse into networks not supported by their digital systems.
3. ATMS is designed for predominantly rural freight conditions and is currently being developed for roll out by the Australian Rail Track Corporation (ARTC) on the National Freight Network. ETCS has been customised and rolled out by some states for urban passenger networks.

4. s47B(a)

5.

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6. s47G(1)(a), s47C, s47B(a)

7. s47G(1)(a), s47C

s47B(a)

s47B(a)

8. s47G(1)(a), s47C, s47B(a)

9.

10.

#### Stakeholder Implications:

11. It is anticipated the alignment of train control signalling technology will have significant implications for governments present in the meeting. Improving interoperability of the rail sector is a National Cabinet and Ministerial priority.

#### Sensitive and Critical Information:

Nil.

Name: Sally Todd

Position: Assistant Secretary

Division: Surface Transport Emissions and Policy

Ph: s22(1)(a)(ii)

Mob: s22(1)(a)(ii)

Contact Officer: s22(1)(a)(ii)

Section: Rail Policy

Mob: s22(1)(a)(ii)

Date: 3 April 2024

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## 1.1 Aligning train control and signalling technology

The lack of interoperability has been a long-standing challenge for the Australian rail industry. With a \$155b pipeline of national rail investments expected over the next decade, there is a risk that interoperability challenges will worsen as digital systems are deployed across the eastern seaboard. Urgent action is needed to avoid this and ensure systems are interoperable and are applied consistently.

s47B(a), s47B(b)

### Engagement

s47B(a), s47B(b)

Detailed stakeholder engagement informed the development of preferred options by testing the base case and options' assumptions.

Stakeholder consultation confirmed that without immediate action, there is a significant risk that the opportunity to coordinate a consistent adoption of interoperable signalling technology will be missed.

### Case for change


A lack of interoperability between the different signalling and train control systems used across Australia's rail system means that:

- Trains are fitted with multiple sets of onboard equipment
- Complex and expensive track-side equipment is duplicated.
- Extra costs in management, maintenance and training.
- Decreased productivity as fewer trains can run on shared tracks.
- Safety risks are increased as there is more room for human error.

s47B(a), s47B(b)

Excerpt from NTC Report *Improving the interoperability of rail systems*

s47B(a), s47B(b)



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EC24-001976


**Australian Government**
**Department of Infrastructure, Transport,  
Regional Development, Communications and the Arts**
**To: Jim Betts, Secretary**
**cc:** Jess Hall, Deputy Secretary, Infrastructure Group

Greg Cox, First Assistant Secretary, Commonwealth Infrastructure Projects Division

**MEETING: Meeting Brief - Rail Interoperability Strategic Business Case**
**Timing:** For meeting on 11am Wednesday 23 October 2024

**Venue:** TBA

**Recommendations:**

1. That you Note the details of this brief. The Department has requested a meeting with NTC, transport for NSW and ARTC to discuss progress toward the Rail Interoperability Strategic Business Case

**Noted / Please Discuss**
**Jim Betts**

Date:

**Comments:**
**Meeting with (External):**

- Josh Murray, Secretary of Transport for New South Wales (Transport for NSW)
- Peter Duncan, Chair Australian Rail Track Corporation (ARTC)
- Wayne Johnson, Chief Executive Officer and Managing Director ARTC
- Carolyn Walsh, Chair of the National Transport Commission (NTC)
- Michael Hopkins, Chief Executive Officer and Commissioner NTC

**Department Attendees (Internal):**

- Jim Betts, Secretary
- Jess Hall, Deputy Secretary, Infrastructure Group
- Greg Cox, First Assistant Secretary, Commonwealth Infrastructure Projects Division

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**What do the attendees want:**

To provide an update on progress toward the Strategic Business Case s47B(a)

**What does the department want:**

To discuss:

- progress of the development of the Strategic Business Case by NTC to achieve consideration by the Infrastructure and Transport Ministers s47B(a) ;

- s47B(a)

- 

**Key Points:**Suggested Talking Points

1. Our department acknowledges the importance of the Strategic Business Case to establish a national policy decision that will define a pathway forward to achieve interoperability in train control and signalling systems.
2. s47B(a)
- 3.
4. s47B(a)
5. To ensure that the technical aspect is addressed, I understand that ARTC is working to assist the establishment a Technology Leadership Group that will have a national focus to develop technical requirements for national interoperability. I note that this work also proposes to outline governance and a national-decision management framework for future Digital Train Control Technology. I understand that ARTC has engaged with the NTC and Transport for NSW, on this work.
6. s47B(a), s47C
7. s47B(a)

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s47B(a)

8.

9.

10

11

12

13. See also Additional Information for background.

14. Stakeholder Implications:

The strategic business case will have implications for Commonwealth, jurisdictions, Rail Infrastructure Managers and industry as it will set the policy direction for train control interoperability.

Name: Rachel Figurski  
Position: Assistant Secretary  
Division: Rail Delivery  
Ph: s22(1)(a)(ii)  
Mob: s22(1)(a)(ii)  
Date: 20/10/2024

Contact Officer: s22(1)(a)(ii)  
Section: ARTC Engagement and Strategy  
Ph: s22(1)(a)(ii)  
Mob: s22(1)(a)(ii)

**Attachments:**

A: National Rail Interoperability Integrated Plan – Version draft 0.9

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**ADDITIONAL INFORMATION**Background:

- As you are aware, at the ITMM in June 2024 it was agreed that the NTC would develop a Strategic Business Case for a train control and signalling interoperability pathway for Australia. This work would build on the findings from NTC's Preliminary Business Case and the ARTC Technical Due Diligence Review of several rail signalling technologies, s47B(a), s47G(1)(a), s47C

- s47B(a), s47C

- s47B(a), s47B(b)

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- s47B(a), s47B(b)
- The department (Rail Delivery Branch with Land Transport Policy Branch representation) met with NTC and their consultants from EY and Deutsche-Bahn on 16 October 2024 to receive a briefing on the development of cost-benefit sharing framework.
  - s47C
  - s47B(a)
  - s47C
 
    - s47(1)(b), s47C, s47D
  - s47C
  - s47B(a), s47C, s47D
  - s47C
  - s47B(a)
  - A draft Strategic Business Case will be shared with the department late October / early November and the NTC expressed a willingness to engage with the department as this work is finalised.

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Document 5 Attachment A (pages 19-21) removed in its entirety as exempt under section 47B(a) and section 47B(b) of the FOI Act.

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EC24-002228


**Australian Government**
**Department of Infrastructure, Transport,  
Regional Development, Communications and the Arts**
**To: Jim Betts, Secretary**
**cc:** Jess Hall, Deputy Secretary, Infrastructure Group

Greg Cox, First Assistant Secretary, Commonwealth Infrastructure Projects Division

**MEETING: Meeting Brief - Rail Interoperability Strategic Business Case**
**Timing:** For meeting on 3.30pm Wednesday 4 December 2024

**Venue:** TBA

**Recommendations:**

1. That you note the details of this brief. The Department has requested a meeting with NTC, ARTC and eastern seaboard Secretaries to continue discussions (from 23 October) regarding progress toward the Strategic Business Case for interoperable digital signalling and train control.

**Noted / Please Discuss**
**Jim Betts**

Date:

**Comments:**
**Meeting with (External):**

- Josh Murray, Secretary of Transport for New South Wales (Transport for NSW)
- Sally Stannard, Director-General of the Department of Transport and Main Roads (Queensland)
- Paul Younis, Secretary of Department of Transport and Planning (Victoria)
- Peter Duncan, Chair Australian Rail Track Corporation (ARTC)
- Wayne Johnson, Chief Executive Officer and Managing Director ARTC
- Carolyn Walsh, Chair of the National Transport Commission (NTC)
- Michael Hopkins, Chief Executive Officer and Commissioner NTC

**Department Attendees (Internal):**

- Jim Betts, Secretary
- Jess Hall, Deputy Secretary, Infrastructure Group
- Greg Cox, First Assistant Secretary, Commonwealth Infrastructure Projects Division
- Sally Todd, Acting First Assistant Secretary, Surface Transport Emissions & Policy Division

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**What do the attendees want:**

To provide an update on progress toward the Strategic Business Case s47B(a)

**What does the department want:**

To continue discussion on:

- progress of the development of the Strategic Business Case by NTC to achieve consideration by the Infrastructure and Transport Ministers;

- s47B(a)

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**Key Points:**

- You, Ms Hall and Mr Cox previously met with Mr Murray, Mr Duncan, Mr Johnson, Ms Walsh and Mr Hopkins on 23 October 2024 to discuss this matter (EC24-001976 refers)

Suggested Talking Points

1. I'd like to welcome Sally Stannard and Paul Younis to the meeting. With alignment of train control and signalling technology on the eastern seaboard being a priority of Government through the National Rail Action Plan, the level of engagement and commitment by this group to enable this priority is appreciated.
2. I welcome the opportunity to meet with you to discuss specific matters regarding the Strategic Business Case, as a follow on discussion from a meeting of some members of this group on 23 October (Queensland and Victoria were not part of the 23 October discussions).
3. It was apparent from our last meeting that a significant body of work still needs to be progressed, prior to the achievement of a defined framework for the roll-out of an interoperable solution. s47B(a)
4. s47B(a)
5. I note that the NTC circulated the draft Strategic Business Case to members of this group earlier this week, to inform our discussion today. I acknowledge the amount of work undertaken by the NTC and its collaborators to deliver the Strategic Business Case within this timeframe.
6. I also understand that the NTC presented an overview of the draft Strategic Business Case at the first meeting of the Interim Configuration Control Board, held yesterday (Tuesday 3 December).

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7. I understand that the draft Strategic Business Case presents a cost benefit analysis based on the National Network for Interoperability (NNI), which includes the ARTC interstate network but does not include the ARTC Hunter Valley network. s47B(a)

8. s47B(a)

- a. *You may wish to ask Carolyn Walsh and Michael Hopkins from the NTC to provide a brief overview of the outcomes from the draft Strategic Business Case and their intended approach to present this to ITMM.*
- b. *You may also wish to ask NTC to discuss their draft recommendations to ITMM that will accompany the Strategic Business Case, including the proposed future work program.*
- c. *You may wish to invite ARTC and the jurisdictions to share their initial views of the draft Strategic Business Case and draft recommendations.*
- d. *You may wish to ask NTC for an overview of the Interim Configuration Control Board and its purpose, and how this will fit into the current governance arrangements.*
- e. *You may also wish to ask ARTC for an update on their work regarding the non-urban solution that they are progressing with Egis.*

9. s47B(a)

- b. *You may wish to invite ARTC and the jurisdictions to share their views regarding this work and the request to undertake a technical assessment of their networks by late February 2025.*

10. s47B(a)

11. In doing so, I look to our NTC colleagues to continue to demonstrate leadership in this space by ensuring all interdependent streams of work have been adequately worked through prior to any decision being sought from ministers.

12. See 'Additional Information' for background.

13. Stakeholder Implications:

The strategic business case will have implications for Commonwealth, jurisdictions, Rail Infrastructure Managers including ARTC, rolling stock operators and industry as it will set the policy direction for train control interoperability.

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Name: Rachel Figurski  
Position: Assistant Secretary  
Division: Rail Delivery  
Ph: s22(1)(a)(ii)  
Mob: s22(1)(a)(ii)  
Date: 26/10/2024  
(updated 3/12/2024)

Contact Officer: s22(1)(a)(ii)  
Section: ARTC Engagement and Strategy  
Ph: s22(1)(a)(ii)  
Mob: s22(1)(a)(ii)

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**ADDITIONAL INFORMATION**Background:

- This is the second meeting on this topic. The first was held on 23 October 2024 and involved a smaller group of attendees; at that meeting it was decided to hold a follow up meeting before Christmas and to expand the invitation list to include Queensland and Victorian state departments.
- As you are aware, at the ITMM in June 2024 it was agreed that the NTC would develop a Strategic Business Case for a train control and signalling interoperability pathway for Australia. s47B(a)

○ s47B(a)

○

- On 2 December 2024, the NTC circulated the Strategic Business Case for s47B(a), Interoperability Policy Direction to attendees of today's meeting (refer **Attachment A**). s47B(a)

s47B(a)

- s47B(a), s47B(b)

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- On 3 December 2024, the first meeting of the Interim Configuration Control Board occurred, chaired by the NTC and attended by the department, ARTC and eastern seaboard jurisdictions. A Terms of Reference for the forum are forthcoming.

- s47B(a), s47B(b)

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- On 9 November 2024, the NTC held a Future Rail Technology forum in Adelaide. Case studies from Canada, United Kingdom and Germany were presented. All speakers shared their challenges with achieving interoperability and their ability to deploy a seamless solution across their network. Speakers also identified that their experience had been very costly and was expected to take many years to execute, with staging often reliant on Government funding.

- s47B(a)

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# Improving interoperability of rail systems – East Coast Signalling Strategic Business Case (SBC)

## National Transport Commission (NTC)

**Proposal:**

s47B(a)

**Legislation**

No legislative changes are proposed.

**Recommendations**

That ITMM:

1.

s47C

2.

3.

Cleared by: Michael Hopkins  
CEO and Commissioner  
National Transport Commission

Distribution to bodies: All *[please specify if limited  
distribution required i.e. 'Jurisdictions only']*

Version: *[Secretariat to complete]*

Contact: Dimi Rigas, s22(1)(a)(ii)  
Executive Leader, Strategy and Government  
Relations

Page 1 of 8

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Supporting statement

The digitalisation of rail presents Australia with a generational opportunity to lift the safety, productivity and efficiency of rail across the continent, and to learn from decades of experience from the world’s early adopters. The current state of 11 signalling systems where each jurisdiction pursues its own approach is driving up the cost of running trains, upgrading networks, attracting and training skilled workers and hindering the freight sector at a time when decarbonisation requires more freight on rail. s47C

s47C

Risks and sensitivities:

s47C

Overview:

Effect	Description
Financial	s47C
Regulatory	
Legal	
Regional	
Other	

Supporting information:

s47C

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s47C



Strategic Business Case Findings

s47C



Benefits

s47C



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<sup>1</sup> s47C



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s47C

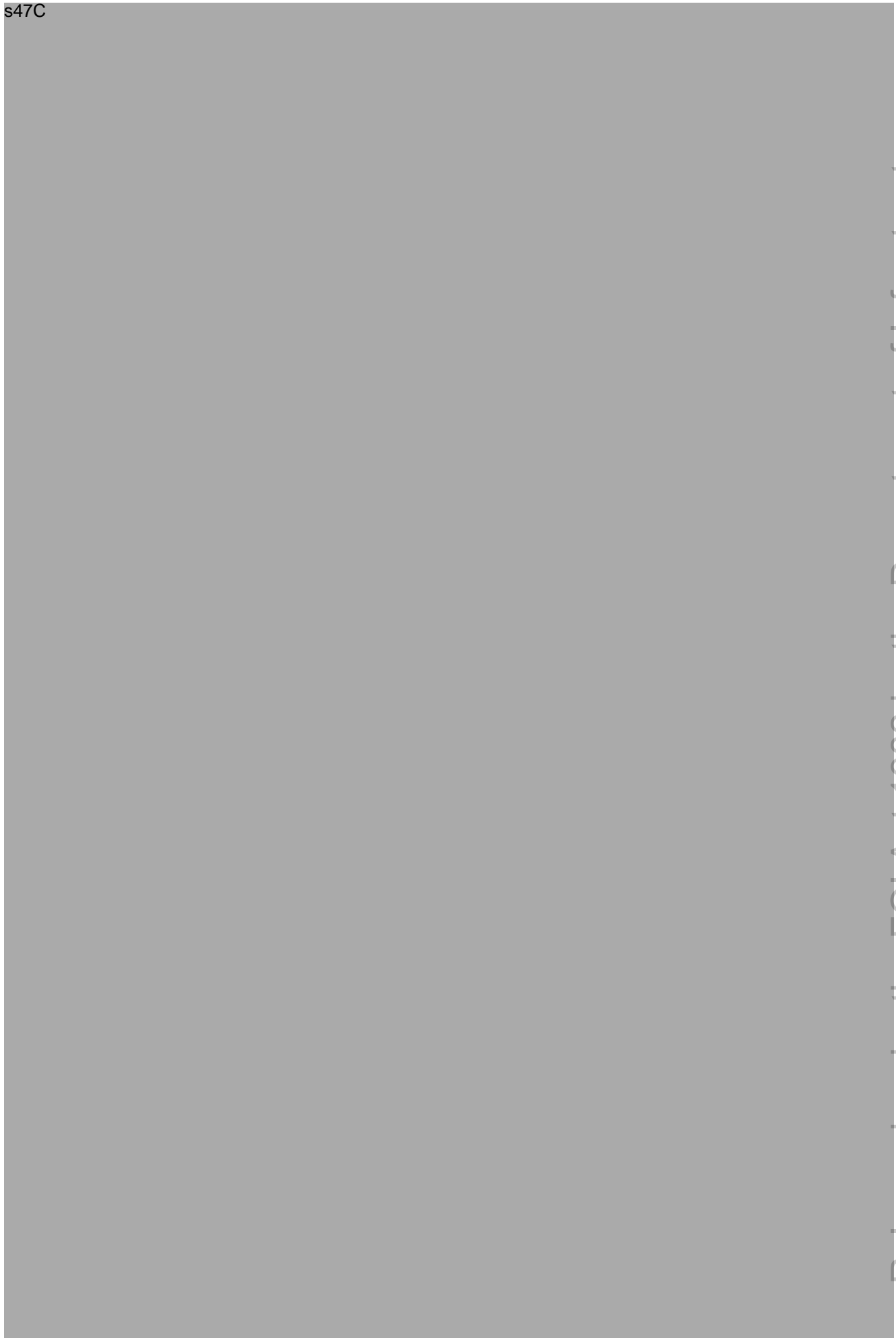
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s47C

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s47C



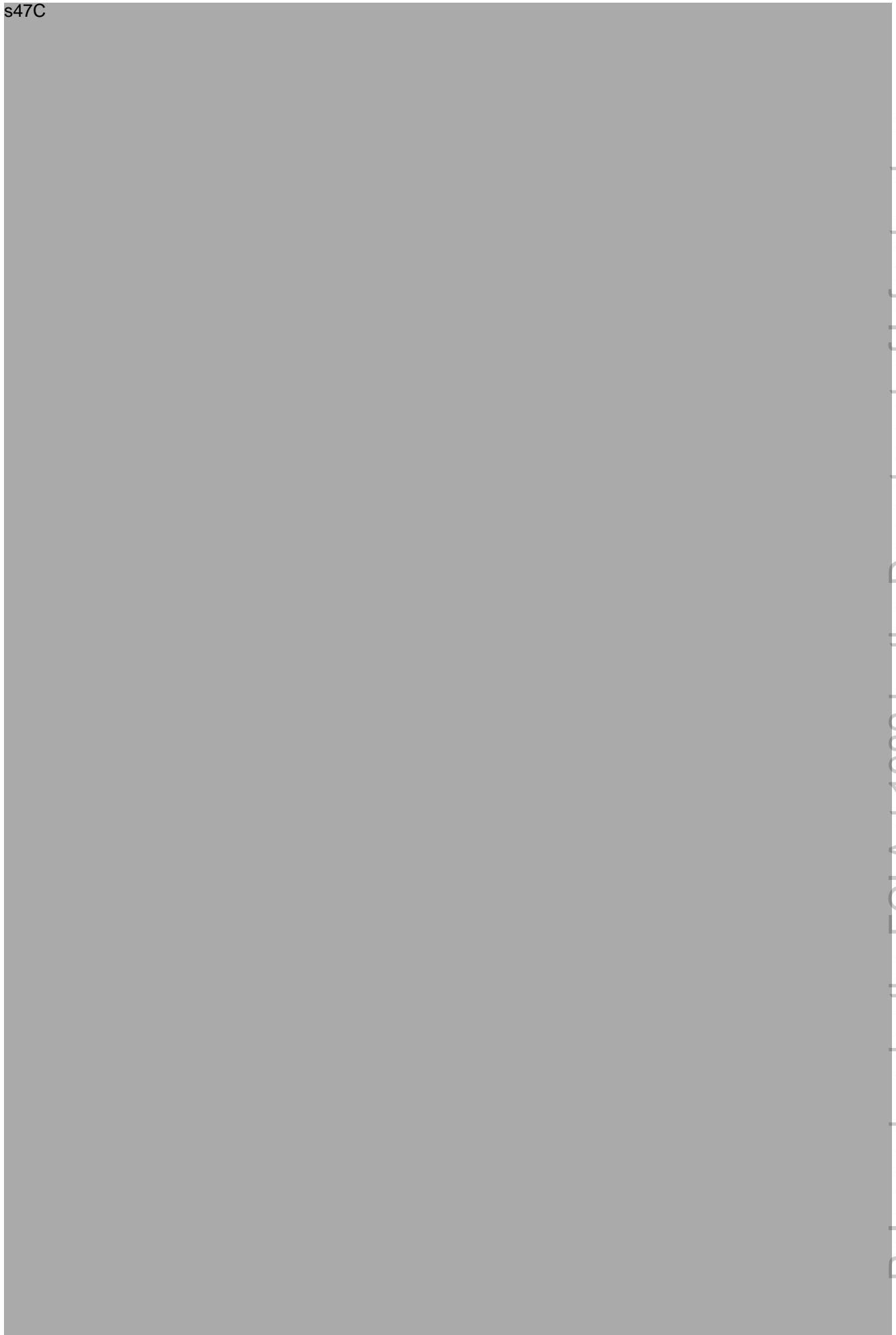
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Transport, Regional Development, Communications, Sport and the Arts

**Quality assurance checklist**

This checklist **MUST** be completed and signed by the clearing officer and provided to the ITMM Secretariat with papers.

	Yes	No	N/A
Is the paper listed on an ITMM agenda?	Y		
Has the paper been provided to ITSOC prior to the ITMM consideration?			*
Has a thorough QA, using guidance on page one, been undertaken?	Y		
Have the styles (accessible in the home tab) been used throughout the document?	Y		
Is the document accessible? For further information on these requirements refer to the <a href="#">Web Content Accessibility Guidelines</a> or the Digital Transformation Agency's <a href="#">Colour and contrast – the 2 essentials of accessible design</a> .	Y		
Does the paper meet the five pages limit?		N	
Does each recommendation start with an action (agree, endorse or approve)?	Y		
Have all financial and resourcing implication been included?	Y		
Are attachments kept to a minimum and only provided if the attachment is needed by members to make a decision?	Y		
If an attachment contains actions, agreements or key dates does the paper contain a corresponding recommendation for the action/agreement/key dates?	Y		
Have large attachments been included as supporting documents (available on request)?		N	
Has OIA been consulted on the regulatory impact of proposal?			N
Is all data, dates and information factually correct?	Y		
Has industry consultation been undertaken? Have all industry's views been captured in the paper?	Y		

Cleared by (e-signature) \_\_\_\_\_ on \_\_\_\_/\_\_\_\_/\_\_\_\_

Additional comments: (add any additional comments that may be useful to the secretariat below):

Attachments C and D to Document 6 (pages 36-56) removed in their entirety as exempt under section 47B(a) and section 47C of the FOI Act.

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EC25-000562



## Australian Government

**Department of Infrastructure, Transport,  
Regional Development, Communications and the Arts**

**To: Jim Betts, Secretary**

**cc:** Jessica Hall, Deputy Secretary, Infrastructure Group  
Richard Wood, A/Deputy Secretary, Transport Group

**MEETING: Meeting Brief - Rail Interoperability Strategic Business Case**

**Timing:** For meeting on 11.00am Friday 21 March 2025

**Venue:** Nishi Level 6 Boardroom -Virtual

### Recommendations:

1. That you **note** the details of this brief. The department has requested a follow-on meeting with NTC, ARTC and eastern seaboard secretaries to continue discussions (from 23 October and 4 December 2024) regarding progress toward the Strategic Business Case for interoperable digital signalling and train control.

**Noted / Please Discuss**

**Jim Betts**

**Date:**

**Comments:**

### Meeting with (External):

- Josh Murray, Secretary, Transport for New South Wales (TfNSW)
- Dush Sharma, Director, National Policy and Intergovernmental Relations (TfNSW)
- Paul Hoffman, Deputy Director-General of the Department of Transport and Main Roads (Queensland)
- Jeroen Weimar, Secretary of Department of Transport and Planning (Victoria)
- William Tieppo, Deputy Secretary – Network Design and Integration, Department of Transport and Planning (Victoria)
- Lachlan McDonald, Executive Director, Intergovernmental Relations, Department of Transport and Planning (Victoria)
- Peter Duncan, Chair Australian Rail Track Corporation (ARTC)
- Wayne Johnson, Chief Executive Officer and Managing Director ARTC
- Carolyn Walsh, Chair of the National Transport Commission (NTC)

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- Michael Hopkins, Chief Executive Officer and Commissioner (NTC)
- Sandra McKay, Executive Leader, Facilitated Reform (NTC)

**Department Attendees (Internal):**

- Jim Betts, Secretary
- Jess Hall, Deputy Secretary, Infrastructure Group
- Greg Cox, First Assistant Secretary, Commonwealth Infrastructure Projects Division
- Paula Stagg, First Assistant Secretary, Surface Transport Emissions & Policy Division

**Prior meetings:**

You, Ms Hall, Mr Cox and Ms Sally Todd previously met with the above external attendees on Wednesday 4 December 2024 to discuss this matter (EC24-002228 refers).

There was also a meeting on the same topic held on Wednesday 23 October 2024 (EC24-001976 refers).

**What do the attendees want:**

To receive an update on progress toward the Strategic Business Case s47B(a)

**What does the department want:**

To continue discussion on:

- progress of the development of the Strategic Business Case by NTC to achieve consideration by the Infrastructure and Transport Ministers s47B(a) ;
- how the Strategic Business Case will address technical development, implementation and cost-sharing risks related to a potential s47C ;
- the further work required to be undertaken to finalise the Strategic Business Case;
- the work to occur following consideration by Infrastructure Transport Ministers Meeting (ITMM), and how this will inform potential future recommendations for decision; and
- how NTC is working collaboratively to take on the feedback provided on the draft Strategic Business Case, and showing leadership to bring together the related work streams underway by NTC, Transport for NSW and proposed work by ARTC and ensuring consultation with all relevant parties including the Rail Infrastructure Managers (RIMs) and Rolling Stock Operators (RSOs).

**Key Points:**Suggested Talking Points

1. I'd like to thank this group for coming back together to continue our discussions from December 2024, relating to the progress of the Strategic Business Case.
2. On behalf of the Commonwealth, I'd like to extend my appreciation for your engagement in this regard and commitment to work towards a shared position to achieve alignment of train control and signalling technology on the eastern seaboard. As you all know, this work is a priority of National Cabinet and progressed under Stage 2 of the National Rail Action Plan.
3. Soon after our last meeting, the NTC released the updated draft Strategic Business Case for review by jurisdictions, the Commonwealth and the ARTC. I understand that this feedback has been provided to NTC.

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4. I acknowledge the amount of work that the NTC has invested to deliver a draft Strategic Business Case within the timeframes given and the way they have engaged with jurisdictions and the Commonwealth during this period.
5. That said, this is highly complex work that carries great significance in terms of shaping our national approach to digital signalling interoperability.
6. To that end, and as I have mentioned previously, I encourage this group to take the time required to get this right. Our department is focussed on ensuring the recommendations presented to Government allow ministers to make decisions that are fully informed and alert to all significant risks.
7. Our department is also working closely with ARTC as one of our Government Business Enterprises, to ensure that the direction being proposed is viable from a national perspective. With ARTC managing over 80% of the National Network for Interoperability, we are expecting that they will do the work needed to support the NTC's and TfNSW's efforts as well as helping to ensure that what we end up with will be not only technically sound but affordable as well, particularly for non-urban areas.

8. s47B(a)

- a. *You may wish to ask Carolyn Walsh and Michael Hopkins from the NTC to provide a brief overview of the outcomes from ITSOC and key themes of the feedback received on the draft Strategic Business Case to date.*
- b. *You may wish to invite ARTC to share their views of the draft Strategic Business Case, what work they think is needed to resolve outstanding matters, and the role ARTC intends to take to support or lead this.*
- c. *You may wish to ask NTC about their intended approach to take this work forward, ahead of ITMM consideration.*

9. s47B(a)

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- a. *You may wish to ask Josh Murray for an update on feedback received to date on their non-urban ETCS technical solution and associated work program.*
- b. *You may wish to invite ARTC to share their views regarding this work, what additional work they consider is needed, and the role ARTC intends to take to support or lead this.*

12. s47B(a)

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s47B(a)

- a. *You may wish to ask Wayne Johnson and Carolyn Walsh to provide an update on this work.*

13. See 'Additional Information' for background.

### Stakeholder Implications:

The strategic business case will have implications for Commonwealth, jurisdictions, Rail Infrastructure Managers including ARTC, rolling stock operators, ONRSR and industry as it will set the policy direction for train control interoperability.

### Sensitive and Critical Information:

1. s47B(a)
2. On 13 March 2025, the department provided feedback to the NTC on the draft Strategic Business Case s47C  
s47B(a)
- a. Department representatives are meeting with NTC on Friday 21 March to discuss this feedback. Infrastructure Australia have also been asked to attend.

3. s47B(a), s47B(b)

Name: Rachel Figurski  
 Position: Assistant Secretary, Rail Delivery  
 Branch  
 Division: Commonwealth Infrastructure Projects  
 Division  
 Ph: s22(1)(a)(ii)  
 Mob: s22(1)(a)(ii)  
 Date: 18/03/2025

Contact Officer: s22(1)(a)(ii)  
 Section: ARTC Engagement & Strategy  
 Ph: s22(1)(a)(ii)  
 Mob: s22(1)(a)(ii)

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**Attachments:****Attachment A:** Draft Strategic Business Case s47C**Attachment B:** Department's feedback on the draft Strategic Business Case**Attachment C:** Notes from ITSOC meeting 14 March 2025Released under the FOI Act 1982 by the Department of Infrastructure,  
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**ADDITIONAL INFORMATION**Background:

- This is the third meeting on this topic. The first was held on 23 October 2024 and involved a smaller group of attendees; at that meeting it was decided to hold a follow up meeting before Christmas and to expand the invitation list to include Queensland and Victorian state departments. This subsequent meeting occurred on 4 December 2025.
- As you are aware, at the ITMM in June 2024 it was agreed that the NTC would develop a Strategic Business Case for a train control and signalling interoperability pathway for Australia.
  - s47B(a) [REDACTED]
  - [REDACTED]
- s47B(a) [REDACTED]
- The NTC is currently working to finalise the Strategic Business Case ahead of consideration by ITMM s47B(a) [REDACTED]
- On 12 December 2024, the NTC circulated the draft Strategic Business Case s47C [REDACTED] Interoperability Policy Direction to a group of jurisdictional representatives. They subsequently confirmed that this version superseded earlier versions, including that shared with this group ahead of the 4 December 2024 meeting.
- The draft Strategic Business Case:
  - s47B(a) [REDACTED]
  - ARTC has previously mentioned that 80% of the NNI is ARTC-managed track (excluding the Hunter Valley network).
  - s47B(a) [REDACTED]
  - [REDACTED]
  - [REDACTED]
  - [REDACTED]
- On 17 March 2025, the second meeting of the Interim Configuration Control Board occurred, chaired by the NTC and attended by the department, ARTC and eastern seaboard jurisdictions. The first meeting was held on 3 December 2024.

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- At this meeting a brief update was shared about the outcomes from ITSOC and the changes planned for the Strategic Business Case prior to finalisation.

- s47B(a)

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- s47B(a)

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Document 7, Attachment A (pages 64-170) removed in its entirety as exempt under section 47B(a) and section 47B(b) of the FOI Act.

Document 7, Attachments B-C (pages 171-180) removed in their entirety as exempt under section 47B(a) of the FOI Act.

Document 8 and Document 8 Attachment A (pages 181-187) removed in their entirety as exempt under section 47B(a) and section 47C of the FOI Act.

## SUPPLEMENTARY BUDGET ESTIMATES 2024–25 – NOVEMBER 2024

CIPD

## National Rail Interoperability

## WHAT HAS CHANGED?

- Improving national rail interoperability is one of the National Cabinet's five priorities for collective action. This priority is being driven by Australia's Infrastructure and Transport Ministers.
- The Independent Review of Inland Rail (the Review) in 2023 recommended that the Australian Rail Track Corporation Ltd (ARTC) further investigate the current interoperability of the ATMS, and develop options to ensure that it is interoperable with the systems being rolled out by jurisdictions.
- On 7 June 2024, the Infrastructure and Transport Ministers' Meeting (ITMM) agreed the National Transport Commission (NTC) will develop a Strategic Business Case for a train control and signalling interoperability pathway for Australia. A key consideration through the Strategic Business Case is how interoperability will be achieved across the national network, including in regional and non-urban environments.
- ARTC are supporting the work of the NTC to develop the Strategic Business Case.

## PROJECT SNAPSHOT/BUDGET

Announced date		29 October 2014		
Project scope				
<ul style="list-style-type: none"><li>ATMS is a modern safe-working system designed for Australian conditions by ARTC.</li><li>ATMS makes use of existing telecommunications networks to provide real time movement authorisations to trains and avoids the need to maintain expensive trackside signals (traffic lights) and associated infrastructure (signal boxes and wires), and digital technologies to enforce train rules automatically. It has the ability to remotely apply the train’s brakes in emergency situations.</li></ul>				
Construction start/end date				
Original construction start	Stages 1 and 2: Mid 2014 Stage 3: Mid 2021		Construction start	Stages 1 and 2: Mid 2014 Stage 3: Mid 2021
Original construction end	Stage 1: May 2016 Stage 2: July 2023 Stage 3: July 2023		Current construction end	Stage 1: September 2020 Stage 2: Under Review Stage 3: Under Review
Funding commitments				
AG contribution * (74%)	Stages 1 and 2: \$50.0 m Stage 3: \$220.0 m		ARTC contribution (26%)	Stages 1 and 2: \$73.6 m Stage 3: \$20.0 m
Total project commitment			Stages 1, 2 and 3: \$ 363.6m	
Expenditure to 30 September 2024			\$175.1m	
* Funding Source: DITRDCA Outcome 1.1 Infrastructure Investment Program				
Jobs supported				
Direct			300	
Indirect			700	
Budget				
Expenditure to 30/9/2024 \$m	2024–25 Budget (expenditure to 30/09/2024) \$m	2025–26 Budget \$m	2026–27 Budget \$m	2027–28 onwards \$m
175.1	69.7(21.8)	0.0	0.0	0.0

Action Officer (EL2):	s22(1)(a)(ii)	Section:	ARTC Engagement and Strategy	
Clearing Officer (AS):	Rachel Figurski	Branch:	Rail Delivery Branch	
Mobile (AS):	s22(1)(a)(ii)	Date:	12/10/2024	Version: 1

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**SUPPLEMENTARY BUDGET ESTIMATES 2024-25 - NOVEMBER 2024****CIPD****SENSITIVITIES**

- Several state jurisdictions have adopted the European Train Control System (ETCS) digital signalling solution for their metropolitan rail networks.
- On 7 June 2024, the Infrastructure and Transport Ministers' Meeting (ITMM) agreed the National Transport Commission (NTC) will develop a Strategic Business Case for a train control and signalling interoperability pathway for Australia with an initial focus on the Eastern Seaboard network.
  - This decision was informed by analysis of the relative benefits of a broad range of technology options as potential interoperability pathways for Australia. This broad analysis will continue to inform the development of the Strategic Business Case and a policy direction for interoperable digital signalling across the nation.
  - The Strategic Business Case is expected to be presented to ITMM for consideration later this year.

**SUGGESTED COMMENTS**

- The Australian Government recognises the benefits a digital signalling system brings to Australia's rail network, including increased reliability, safety and operating efficiencies.
- The Australian Government understands that the NTC has been actively engaging with ARTC, state jurisdictions and industry in the development of the Strategic Business Case.
- Regardless of the technical solution selected to inform the national interoperability pathway, the Australian Government remains committed to working with the ARTC and jurisdictions to achieve interoperability with other digital signalling systems being deployed on overlapping parts of the network.
- ATMS continues to operate between Port Augusta and Whyalla in South Australia, as achieved through Stage 1 of the project.
- Pending an ITMM decision on the national interoperability pathway, the direction for the ATMS project is under review.

**BACKGROUND**

- Stage 1 (Port Augusta to Whyalla) — ATMS was commissioned as the live safety system in September 2020.
- Stage 2 (Port Augusta to Kalgoorlie) — development work was completed February 2022. Delivery works commenced in February 2022, however challenges were encountered in deployment.
  - Since the ITMM decision of June 2024 for NTC to progress a Strategic Business Case <sup>s47C</sup> [REDACTED], ARTC have ceased all implementation stages and development activities for ATMS.
- Stage 3 (detailed design plus train-borne units Melbourne / Parkes to Perth) — Australian Government funding commitment of \$220 million was announced in February 2021.
- Improving the interoperability of rail systems is a National Cabinet priority. It is being led by the NTC with input from all jurisdictions under the ITMM work agenda.
- On 9 June 2023, ITMM approved a four-year work program to progress interoperability. The Commonwealth provided \$8.3 million to the NTC to deliver the interoperability workplan, which will:
  - focus on aligning train control and signalling along the Eastern Seaboard network; and
  - develop mandatory interoperability standards, including for signalling and digital train technology.



**SUPPLEMENTARY BUDGET ESTIMATES 2024-25 - NOVEMBER 2024****CIPD**

- ARTC is working collaboratively with state jurisdictions, the NTC and the Commonwealth to explore interoperability solutions.
- Questions relating to ATMS and digital signalling on the ARTC network should be directed to ARTC.
- Questions relating to the National Rail Action Plan and the rail interoperability agenda should be directed to the Surface Transport Emissions and Policy Division.

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## ADDITIONAL BUDGET ESTIMATES 2024-25 – February 2025

CIPD

EC24-002587

## NATIONAL RAIL INTEROPERABILITY

## WHAT HAS CHANGED?

- Improving national rail interoperability is one of the National Cabinet's five priorities for collective action. This priority is being driven by Australia's Infrastructure and Transport Ministers.
- The Independent Review of Inland Rail (the Review) in 2023 recommended that the Australian Rail Track Corporation Ltd (ARTC) further investigate the current interoperability of the ATMS, and develop options to ensure that it is interoperable with the systems being rolled out by jurisdictions.
- On 7 June 2024, the Infrastructure and Transport Ministers' Meeting (ITMM) agreed the National Transport Commission (NTC) will develop a Strategic Business Case for a train control and signalling interoperability pathway for Australia. A key consideration through the Strategic Business Case is how interoperability will be achieved across the national network, including in regional and non-urban environments.
- ARTC are supporting the work of the NTC to develop the Strategic Business Case. Pending an ITMM decision on the national interoperability pathway, the ATMS project has been paused.

## PROJECT SNAPSHOT/BUDGET

Announced date		29 October 2014	
Project scope			
<ul style="list-style-type: none"><li>ATMS is a modern safe-working system designed for Australian conditions by ARTC.</li><li>ATMS makes use of existing telecommunications networks to provide real time movement authorisations to trains and avoids the need to maintain expensive trackside signals (traffic lights) and associated infrastructure (signal boxes and wires), and digital technologies to enforce train rules automatically. It has the ability to remotely apply the train's brakes in emergency situations.</li></ul>			
Construction start/end date			
Original construction start	Stages 1 and 2: Mid 2014 Stage 3: Mid 2021	Construction start	Stages 1 and 2: Mid 2014 Stage 3: Mid 2021
Original construction end	Stage 1: May 2016 Stage 2: July 2023 Stage 3: July 2023	Current construction end	Stage 1: September 2020 Stage 2: Under Review Stage 3: Under Review
Funding commitments			
AG contribution * (74%)	Stages 1 and 2: \$50.0 m Stage 3: \$220.0 m	ARTC contribution (26%)	Stages 1 and 2: \$73.6 m Stage 3: \$20.0 m
Total project commitment		Stages 1, 2 and 3: \$363.6m	
Expenditure to 31 January 2025		\$175.1m	
* Funding Source: DITRDCA Outcome 1.1 Infrastructure Investment Program			
Jobs supported			
Direct		300	
Indirect		700	

## Budget

Action Officer (EL2):	s22(1)(a)(ii)	Section:	ARTC Engagement and Strategy		
Clearing Officer (AS):	Rachel Figurski	Branch:	Rail Delivery Branch		
Mobile (AS):	s22(1)(a)(ii)	Date:	24/01/2025	Version:	1

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**ADDITIONAL BUDGET ESTIMATES 2024-25 – February 2025****CIPD**

Expenditure to 30/6/2024 \$m	2024–25 Budget (expenditure to 31/01/2025) \$m	2025–26 Budget \$m	2026–27 Budget \$m	2027–28 onwards \$m
153.2	116.8 (21.8)	0.0	0.0	0.0

**SENSITIVITIES**

- Several state jurisdictions have adopted the European Train Control System (ETCS) digital signalling solution for their metropolitan rail networks.
- On 7 June 2024, the Infrastructure and Transport Ministers' Meeting (ITMM) agreed the National Transport Commission (NTC) will develop a Strategic Business Case for a train control and signalling interoperability pathway for Australia with an initial focus on the Eastern Seaboard network.
  - This decision was informed by analysis of the relative benefits of a broad range of technology options as potential interoperability pathways for Australia. This broad analysis will continue to inform the development of the Strategic Business Case and a policy direction for interoperable digital signalling across the nation.
  - The Strategic Business Case is expected to be presented to ITMM for consideration later this year.

**SUGGESTED COMMENTS**

- The Australian Government recognises the benefits a digital signalling system brings to Australia's rail network, including increased reliability, safety and operating efficiencies.
- The Australian Government understands that the NTC has been actively engaging with ARTC, state jurisdictions and industry in the development of the Strategic Business Case.
- Regardless of the technical solution selected to inform the national interoperability pathway, the Australian Government remains committed to working with the ARTC and jurisdictions to achieve interoperability with other digital signalling systems being deployed on overlapping parts of the network.
- ATMS continues to operate between Port Augusta and Whyalla in South Australia, as achieved through Stage 1 of the project.
- Pending an ITMM decision on the national interoperability pathway, the ATMS project has been paused.

**BACKGROUND**

- Stage 1 (Port Augusta to Whyalla) — ATMS was commissioned as the live safety system in September 2020.
- Stage 2 (Port Augusta to Kalgoorlie) — development work was completed February 2022. Delivery works commenced in February 2022, however challenges were encountered in deployment.
  - Since the ITMM decision of June 2024 for NTC to progress a Strategic Business Case <sup>s47C</sup>, ARTC have paused all implementation stages and development activities for ATMS.
- Stage 3 (detailed design plus train-borne units Melbourne / Parkes to Perth) — Australian Government funding commitment of \$220 million was announced in February 2021.
- Improving the interoperability of rail systems is a National Cabinet priority. It is being led by the NTC with input from all jurisdictions under the ITMM work agenda.

**ADDITIONAL BUDGET ESTIMATES 2024-25 – February 2025****CIPD**

- On 9 June 2023, ITMM approved a four-year work program to progress interoperability. The Commonwealth provided \$8.3 million to the NTC to deliver the interoperability workplan, which will:
  - focus on aligning train control and signalling along the Eastern Seaboard network; and
  - develop mandatory interoperability standards, including for signalling and digital train technology.
  - ARTC is working collaboratively with state jurisdictions, the NTC and the Commonwealth to explore interoperability solutions.
  - Questions relating to ATMS and digital signalling on the ARTC network should be directed to ARTC.
  - Questions relating to the National Rail Action Plan and the rail interoperability agenda should be directed to the Surface Transport Emissions and Policy Division.

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## BUDGET ESTIMATES 2024-25 – March 2025

CIPD

EC254-000596

## Digital Signalling and Train Control (Interoperability)

## WHAT HAS CHANGED?

- Improving national rail interoperability is one of the National Cabinet's five priorities for collective action. This priority is being driven by Australia's Infrastructure and Transport Ministers.
- The Independent Review of Inland Rail (the Review) in 2023 recommended that the Australian Rail Track Corporation Ltd (ARTC) further investigate the current interoperability of the ATMS, and develop options to ensure that it is interoperable with the systems being rolled out by jurisdictions.
- On 7 June 2024, the Infrastructure and Transport Ministers' Meeting (ITMM) agreed the National Transport Commission (NTC) will develop a Strategic Business Case for a train control and signalling interoperability pathway for Australia. A key consideration through the Strategic Business Case is how interoperability will be achieved across the national network, including in regional and non-urban environments.
- ARTC are supporting the work of the NTC to develop the Strategic Business Case. Pending an ITMM decision on the national interoperability pathway, the ATMS project has been paused.

## PROJECT SNAPSHOT/BUDGET

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## Budget

Action Officer (EL2):	s22(1)(a)(ii)	Section:	ARTC Engagement and Strategy		
Clearing Officer (AS):	Rachel Figurski	Branch:	Rail Delivery Branch		
Mobile (AS):	s22(1)(a)(ii)	Date:	14/03/2025	Version:	1

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**BUDGET ESTIMATES 2024-25 – February 2025****CIPD**

Expenditure to 30/6/2024 \$m	2024–25 Budget (expenditure to 31/01/2025) \$m	2025–26 Budget \$m	2026–27 Budget \$m	2027–28 onwards \$m
153.2	21.8 (21.8)	94.9	0.0	0.0

**SENSITIVITIES**

- Several state jurisdictions have adopted the European Train Control System (ETCS) digital signalling solution for their metropolitan rail networks.
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  - This decision was informed by analysis of the relative benefits of a broad range of technology options as potential interoperability pathways for Australia. This broad analysis will continue to inform the development of the Strategic Business Case and a policy direction for interoperable digital signalling across the nation.
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**SUGGESTED COMMENTS**

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**BACKGROUND**

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- Stage 3 (detailed design plus train-borne units Melbourne / Parkes to Perth) — Australian Government funding commitment of \$220 million was announced in February 2021.
- Improving the interoperability of rail systems is a National Cabinet priority. It is being led by the NTC with input from all jurisdictions under the ITMM work agenda.

**BUDGET ESTIMATES 2024-25 – February 2025****CIPD**

- On 9 June 2023, ITMM approved a four-year work program to progress interoperability. The Commonwealth provided \$8.3 million to the NTC to deliver the interoperability workplan, which will:
  - focus on aligning train control and signalling along the Eastern Seaboard network; and
  - develop mandatory interoperability standards, including for signalling and digital train technology.
  - ARTC is working collaboratively with state jurisdictions, the NTC and the Commonwealth to explore interoperability solutions.
  - Questions relating to ATMS and digital signalling on the ARTC network should be directed to ARTC.
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