

# Chapter 1

## Introduction and background

1.1 On 16 March 2016, the following matters were referred to the Senate Rural and Regional Affairs and Transport References Committee (the committee) for inquiry and report by 25 August 2016:

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

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

1.2 On 9 May 2016, the inquiry lapsed with the dissolution of the Senate and House of Representatives for a general election on 2 July 2016.<sup>1</sup>

1.3 On 15 September 2016, the Senate agreed to re-refer the inquiry with a reporting date of 18 October 2017.<sup>2</sup>

### Conduct of the inquiry

1.4 The inquiry was advertised in *The Australian* and on the committee's webpage. The committee also wrote to Commonwealth and state government departments, industry stakeholder groups and individuals to invite submissions. Details regarding the inquiry, and associated documents are available on the committee's webpage at [www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Rural\\_and\\_Regional\\_Affairs\\_and\\_Transport/Railindustry45](http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/Railindustry45).

1.5 The committee received 20 public submissions. A list of submissions is included at Appendix 1. Public submissions to the inquiry are also published on the committee's webpage.

1.6 The committee held three public hearings in relation to its inquiry. They were held in Newcastle on 1 May 2017, Melbourne on 16 June 2017, and Canberra on 30

---

1 *Journals of the Senate* No. 147, 9 May 2016, p. 3964.

2 *Journals of the Senate* No. 7, 15 September 2016, p. 225.

August 2017. A list of witnesses who appeared at the hearings is included at Appendix 2.

1.7 On 1 May 2017, the committee visited engineering company Downer Rail's workshop site in Cardiff, NSW. The site visit provided the committee with a first-hand overview of the workshop's provision of technical support, as well as refurbishment, maintenance, technical and process innovation services to NSW's rail industry. The committee was also provided with an overview of the type of work undertaken by the company's skilled workforce, including its structural engineers, spray painters, tradesmen and trade assistants.

### **Early development of rail infrastructure**

1.8 The history of Australia is clearly reflected in its current rail infrastructure system. Australia's geography, its sparse population, political system and the historical role and past decisions of governments have all had an influence on the development of Australia's rail industry. Government regulation, investment decisions affecting the performance of different modes of transport, changes in technology, and private enterprise, have also contributed to the nation's current land transport system, including its railways.

1.9 Prior to the federation of the states in 1901, the development of rail networks in each of the states occurred independently of each other. During the boom years of railway expansion – between 1860 and 1890<sup>3</sup> – each colony developed its own railway network. Very little consideration was given, at the time, to how these various networks could operate together as part of a single network, and connect across interstate borders.

1.10 Most of the impetus for the early development of rail was driven by immediate commercial imperatives – to connect rural areas to their nearest capital cities and local ports for the transportation of materials – primarily for trade. As a result, the first railway networks in the colonies were built and operated by private companies. Most of these private operations proved unsustainable, however, and government guarantees and financial capital were required to complete the lines.<sup>4</sup>

1.11 In much the same way as today's states make decisions to protect their own interests, individual colonies pre-Federation acted for the benefit of their own constituents. As colonies viewed each other as competition for trade and export, there was very little incentive to work together to coordinate a railway network that crossed each other's territory. This situation continued past Federation, with land transport remaining largely a state responsibility and the fledgling states continuing to control

---

3 Productivity Commission, 'Progress in rail reform', Appendix C: *History of railways in Australia*, p. 1.

4 Productivity Commission, 'Progress in rail reform', Appendix C: *History of railways in Australia*, p. 1.

the country's land transport networks via their regulatory structures.<sup>5</sup> Consequently, most of the rail construction efforts stopped at state boundaries.

1.12 The impact of the competing colonies' short-sighted decision-making was underlined by the Secretary of the Department of Infrastructure and Regional Development (DIRD) Mr Mike Mrdak, who observed:

What linked the colonies through the Federation at the time was rail, apart from Western Australia initially. It was interesting that one of the things that they left out of the powers of the Commonwealth was rail. Even though it was very much the lifeblood of the transport system of the late 19th century, it was expressly excluded from a Commonwealth responsibility by the constitutional founders because it was seen as potentially the national government shouldn't be interfering in the powers of the states and their ability to still compete with each other. It's a problem that still haunts us because, not only have we had to deal with the spectre of three rail gauges, which is a unique phenomenon globally that we've done that, but for much of the last 116 years, we've also dealt with something even more difficult, which is state-based regulation of transport operations.

...viewed from the perspective of a newly-formed Federation, the short-sightedness of individual decisions of that time for the colonies was glaring. What we've discovered over the last century is that it makes the need for a government that takes responsibilities for the nation, for matters affecting the nation as a whole, really important.<sup>6</sup>

1.13 It was in the late 20<sup>th</sup> century, as Australia's economy became more open to trade in other markets, when state regulations were identified as a barrier to interstate trade and the growth of the economy. The disjointed network across several jurisdictions also became an obvious impediment to the benefits of federalism – the security of a national defence force, removal of trade tariffs and increased access to trade and commerce in a single national market.

1.14 There have been attempts made to establish a more coordinated rail transport system, but change has been very gradual and it continues to be a work in progress. Some of the 'legacy' challenges, and the entrenched problems which arose as a result of states adopting different rail gauges and regulatory structures, are outlined later in this chapter.

1.15 Notwithstanding the efforts made by federal and state jurisdictions in working toward a coordinated interstate network, the lack of harmonisation across the various

---

5 Mr Mike Mrdak AO, Secretary of Department of Infrastructure and Regional Development, "Secretary Series with Mike Mrdak AO", 23 August 2017, speech delivered at the Institute of Public Administration Australia ACT Division, p. 8, Transcript available <https://vs286790.blob.core.windows.net/docs/Event-Documents/IPAA%202017%20-%20Transcript%20-%20Secretary%20Series%20with%20Mike%20Mrdak%20-%2023%20August%202017.pdf>. (Accessed 18 September 2017).

6 Mr Mike Mrdak AO, Secretary of Department of Infrastructure and Regional Development, "Secretary Series with Mike Mrdak AO", 23 August 2017, speech delivered at the Institute of Public Administration Australia ACT Division, p. 5.

railway networks remains a hindrance to the country's connectivity. Each state and territory continues to manage its own distinct railway network and rail manufacturing economy.

1.16 The lack of systemic coordination across Australia's rail industry was identified as a significant issue by a number of submitters and witnesses.<sup>7</sup>

### **A history of differences**

1.17 The following section outlines some of the differences across rail networks. It considers the impact of the lack of interstate rail harmonisation, including rail gauges (the distance between the rails) and regulatory structures on the costs to safety and the economy.

#### ***Rail gauge***

1.18 Australia's railway networks operate on different gauges. As a consequence of the separate development of rail networks under the auspices of different state governments, the railway networks also operate according to different standards and practices. Rail lines, equipment and operating practices across networks are not compatible, and efforts to standardise have proved difficult and not always practical. One such example is the use of different rail gauges. This particular difference has proved a major obstacle to standardising the states and territories' railway networks.

1.19 Historically, travel between cities and states required that passengers and freight be transferred between trains (operating on different rail gauges) at the border or at rail junctions. Given the construction of railways was intended to link each capital city with its outer towns and regions – rather than connect the interstate capital cities – the use of different rail gauge systems, at least initially, was not cause for concern among the colonial governments. The problem did, however, become acute when it was recognised that the rapid passage of supplies and troops across the states (particularly during the two World Wars) was impeded by the absence of a standardised rail gauge network.<sup>8</sup>

1.20 Currently, the most common rail gauges in Australia are the standard, narrow and broad gauges. When railway construction began in Australia in the 1850s, however, different rail gauges were adopted depending on the individual preference of those constructing them. The standard gauge (1435mm), which was used in England and Europe, was adopted in NSW, while the broad gauge (1600mm) which was more widely used in Ireland, was adopted in Victoria and parts of South Australia. Queensland, Tasmania and Western Australia adopted the narrow gauge system

---

7 Department of Infrastructure and Regional Development, available at <https://infrastructure.gov.au/rail/trains/history.aspx>. (Accessed 19 September 2017). See, also Mr John Austen, *Submission 1*, Mr Shaun Goss, *Submission 3*, Rail Industry Safety and Standards Board, *Submission 6*, Rail Manufacturing CRC, *Submission 9*, Centre for Future Work, *Submission 10*, Australian Manufacturing Workers' Union, *Submission 11*, and Queensland Department of Transport and Main Roads, *Submission 15*.

8 Productivity Commission, 'Progress in rail reform', Appendix C: *History of railways in Australia*, p. 2.

(1067mm) as this was cheaper to build in more remote places. The narrow gauge system, which required less land clearance, was particularly useful for industries such as timber and mining.<sup>9</sup>

1.21 While the process of converting Australia's interstate rail network to a standard gauge track finally began in the 1930s, the complete harmonisation of the various rail gauges has yet to be completed. A national standard gauge network which connects the capital cities does exist. It is, however, not practical or feasible to standardise all rail gauges across Australia. By using the state of Queensland as an example, the difficulties associated with standardising rail gauges can be clearly illustrated:

Queensland has around 9000 km of narrow gauge track. Around 2500 km of this track in Central Queensland (CQ) caters for in excess of 200 million tonnes of coal freight annually and that transport is from mines in CQ to adjacent ports. The cost of changing gauge for this network would be in the many 10s of billions of dollars with negligible change in rail productivity arising from any reconstruction to standard gauge.<sup>10</sup>

1.22 The rail connection between capital cities on the eastern seaboard was only completed in 1995, between Melbourne and Adelaide. It took another ten years before a standard gauge network connected Alice Springs to Darwin in January 2004.<sup>11</sup>

### ***State and territory development of rail infrastructure***

#### *New South Wales*

- NSW's first rail link was constructed between Sydney and Parramatta, for the primary purpose of transporting the valuable wool clip to Sydney by train. The project was initially backed by wealthy pastoralists, but ultimately Sydney investors provided the funds and the Sydney Railway Company (incorporated in 1849) commenced the work in 1850. During construction, the project ran into financial problems and was taken over by the colonial government. The line eventually opened on 26 September 1855.<sup>12</sup>

#### *Victoria*

- The country's first railway line opened between Melbourne's Flinders Street Station and Port Melbourne on 12 September 1854 (and has since been incorporated into Melbourne's electric light railway (tram) system).<sup>13</sup>

---

9 Productivity Commission, 'Progress in rail reform', Appendix C: *History of railways in Australia*, p. 2.

10 Rail Industry Safety and Standards Board, *Submission 6*, p. 2.

11 Department of Infrastructure and Regional Development, <https://infrastructure.gov.au/rail/trains/history.aspx> (Accessed 21 September 2017).

12 Website: NSW Museum of Applied Arts and Sciences, <https://maas.museum/inside-the-collection/2015/09/26/happy-160th-birthday-sydney-trains/> (Accessed 3 October 2017).

13 Department of Infrastructure and Regional Development, <https://infrastructure.gov.au/rail/trains/history.aspx> (Accessed 15 September 2017).

### *South Australia*

- In 1856, the first steam powered trains built by the South Australian colonial government operated between Adelaide and Port Adelaide. Prior to this in 1854, the state had a horse-drawn railway operating at the mouth of the Murray River.<sup>14</sup>

### *Queensland*

- The first railway in Queensland ran from Ipswich inland to Grandchester using the narrow 1067 mm gauge. The system was extended further to the Darling Downs before being connected with Brisbane in 1875.<sup>15</sup>

### *Western Australia*

- The first railway in Western Australia began operating in 1871, and was run by a private railway company which transported timber from Lockville to Yoganup, south of Perth. The first government railway opened in 1879 between Geraldton and Northampton. In the 19<sup>th</sup> century the network in south-western Western Australia was built as 1067 mm gauge lines, but in the 20<sup>th</sup> century the eastern states were connected to Perth and Esperance with standard 1435 mm gauge lines.<sup>16</sup>

### *Tasmania*

- A railway line 72 km long opened between the Northern Tasmanian towns of Launceston and Deloraine in 1868. It was built to the 1800 mm gauge by operator Launceston and Western Railway Company. Subsequently, the Tasmanian government passed an act of Parliament incorporating the Tasmanian Mainline Railway Company. This company built the main line between Launceston and the state capital, Hobart.<sup>17</sup>

### *Northern Territory*

- On 1 October 1889, a railway between Darwin and Pine Creek (253 km) became operational. The line was never profitable, and Pine Creek was taken over by the Australian Government in 1911. The line was subsequently incorporated into the North Australia Railway's operations (linking Darwin with Birdum) until its closure in 1929. The completion of the Alice Springs to

---

14 Department of Infrastructure and Regional Development, <https://infrastructure.gov.au/rail/trains/history.aspx> (Accessed 15 September 2017).

15 Department of Infrastructure and Regional Development, <https://infrastructure.gov.au/rail/trains/history.aspx> (Accessed 15 September 2017).

16 Department of Infrastructure and Regional Development, <https://infrastructure.gov.au/rail/trains/history.aspx> (Accessed 15 September 2017).

17 Department of Infrastructure and Regional Development, <https://infrastructure.gov.au/rail/trains/history.aspx> (Accessed 15 September 2017).



---

Darwin standard gauge rail link in January 2004 resulted in a national rail network linking all mainland state and territory capital cities.<sup>18</sup>

#### *Australian Capital Territory*

- The first railway infrastructure was constructed in the ACT when a 10 km standard gauge branch line opened between Queanbeyan, NSW, and Canberra in 1914. Passenger operations commenced in 1923.<sup>19</sup>

#### **Regulatory structures**

1.23 The committee received a number of submissions which pointed to inefficiencies within the rail manufacturing industry. It was noted that regulatory structures, in relation to matters such as safety, training and recognition of qualifications can differ considerably under different regulatory structures and across different jurisdictions. Submitters were consistent in their view that "greater harmonisation of standards, regulations and procurement practices across all rail sectors is required" and that "best practice in tendering will reduce the cost burden."<sup>20</sup> It was acknowledged, however, that the process required to reach this end has remained a wicked problem.

1.24 In June 2003, the Rail Industry Safety and Standards Board (RISSB), was established by the Australasian Railway Association (ARA). RISSB is a not-for-profit company which is owned, and largely funded, by its industry members. It does, however, receive some funding from both the Commonwealth and state governments.<sup>21</sup>

1.25 RISSB has as its primary responsibility the development and management of rail industry standards, rules, codes of practice and guidelines – all of which have national application.<sup>22</sup> It has been charged with harmonising standards and practices to generate interoperability, and to improve safety and efficiency across the railway sector. RISSB is the single body accredited by Standards Australia to develop national rail standards.

1.26 Stakeholders noted that the benefits of harmonising the different systems are obvious – including increased efficiencies from not having to deal with a myriad of different standards across the industry. It was also acknowledged, however, that the mandatory adoption of new standards and codes of practice across the industry is not always economically feasible and could, at times, be counterproductive.<sup>23</sup>

---

18 Department of Infrastructure and Regional Development, <https://infrastructure.gov.au/rail/trains/history.aspx> (Accessed 15 September 2017).

19 Department of Infrastructure and Regional Development, <https://infrastructure.gov.au/rail/trains/history.aspx> (Accessed 15 September 2017).

20 Australasian Railway Association, *Submission 7*, p. 2.

21 Rail Industry Safety and Standards Board, *Submission 6*, p. 3.

22 Members include companies and organisations involved in rail freight and passenger operations, track management, suppliers and contractors.

23 Rail Industry Safety and Standards Board, *Submission 6*, p. 3.

1.27 The industry has therefore, largely supported a progressive, voluntary adoption approach to harmonising standards and practices – an approach that takes an individual company's situation into consideration. The current approach also allows a company to consider whether there is a business case for change within its operations, and takes account of both the cost and benefits of any change.<sup>24</sup> It was noted, however, that there are some areas where mandatory harmonisation is required – particularly around matters of safety, such as rolling stock lighting where the standard specifies the visibility and layout of this lighting.<sup>25</sup>

1.28 RISSB's role in working toward regulatory consistency is discussed further in Chapter 2.

### *Legacy issues*

1.29 Given the history of rail, and the differences adopted by states and territories there are a number of 'legacy' issues which continue to create problems across the sector. While the different rail gauges and individual regulatory structures have already been referred to, differences in relation to standards and codes of practice are also 'legacy' issues, which can have an impact on safety performance, economic productivity and efficiency.

### *Safety standards*

1.30 The 2012 Taig Review<sup>26</sup> noted that safety standards and the measurement of safety performance are not measured or monitored well at the national level. It was noted that information on accidents is recorded differently by individual state regulators and that available data is presented in formats that are not comparable. As a result, often the data – which is collated and published by the Australian Transport Safety Bureau (ATSB) – is not useful or meaningful. The Taig Review noted, for example, that the information provided in relation to serious incidents and fatalities was not disaggregated to separate those people (passengers, staff, and members of the public) injured from accidents and those suspected of suicide.<sup>27</sup>

### *Fragmented markets and issues of scale*

1.31 Rather than Australia being represented by one central, national market, Australia has historically been made up of a number of smaller, fragmented rail markets. This fact continues to act as a deterrent to investment in larger scale manufacture and innovation. Issues of scale also act as a barrier to expansion, and these problems are compounded by the inefficiencies associated with manufacturing railway products to different standards and specifications.

---

24 Rail Industry Safety and Standards Board, *Submission 6*, p. 3.

25 Rail Industry Safety and Standards Board, *Submission 6*, p. 3.

26 In 2012, as part of its funding agreement with the Rail Industry Safety and Standards Board, the Australian Government arranged for a review of RISSB's processes and activity to be conducted. The review was undertaken by specialist international consultant, Mr Tony Taig.

27 The Taig Review: TTAC Limited, *Review of the Rail Industry Safety and Standards Board and its MOU with the Governments*, June 2012, pp 11-12.



---

### *Continuity of production*

1.32 The lack of a strong pipeline of investment in rolling stock has resulted in a lack of continuity in rail manufacturing. If Australia's rail industry is to be sustainable, this situation needs to change. The current ad hoc approach to rolling stock orders continues to create uncertainty for manufacturers and is a disincentive for businesses to invest in expensive capital and research and development. The Rail Manufacturing CRC (RMCRC) refers to this lack of investment certainty and 'stop-start' cycle of production as the 'valley of death', a term used in defence manufacturing.<sup>28</sup>

### *Lack of innovation*

1.33 As the Australian economy transitions towards knowledge-based industries, the low level of innovation being implemented across the industry continues to be both a concern and a key challenge for the rail manufacturing sector.

1.34 A lack of certainty about future contracts, a lack of continuity and a lack of technical expertise have contributed to an understandable lack of confidence around investing in innovation and technology. In the long term, however, the Australian rail manufacturing industry will not be able to maintain its viability without increased export offerings and competitiveness – the path to which is innovation.<sup>29</sup>

### *Procurement*

1.35 The various state jurisdictions are not required to coordinate or benchmark their procurement efforts. This factor continues to have an impact on procurement efficiencies and has led to clashes in timing of tendering obligations, complexities in design and build, the low volume of orders (impacting a longer-term, national pipeline for wagon builds) and the ability to maintain a standing workforce and tooling lines. These inefficiencies continue to have an impact on value for money, for both consumers and taxpayers.<sup>30</sup>

### *The need for harmonisation*

1.36 The legacy issues arising from the separate development of railways and a lack of harmonisation continue to prove costly. Stakeholders, including the Australian Manufacturing Workers' Union (AMWU) stressed the seriousness of the situation:

Unfortunately, across Australia, each State still 'does its own thing' in designing and ordering its public transport rolling stock. This lack of national consistency in procurement, design and standards is creating vast inefficiencies for local manufacturers. This undermines local jobs. Without action, this fragmented approach could see the loss of our local industry altogether before long.<sup>31</sup>

---

28 Rail Manufacturing CRC, *Submission 9*, p. 5.

29 Rail Manufacturing CRC, *Submission 9*, p. 5.

30 Australian Manufacturing Workers' Union, *Submission 11*, p. 9.

31 Australian Manufacturing Workers' Union, *Submission 11*, Attachment 1, p. 3.

1.37 The Taig Review indicated that although state and federal governments are investing heavily in rail, what remains absent is a strong focus on the outcomes at the national level. The review argued that this is borne out by the absence of an overview of public spending on railways, at both state and federal levels, and lack of uniformity in the reporting of safety performance across the different jurisdictions.<sup>32</sup>

### **Role of the Commonwealth**

1.38 The Commonwealth government has long recognised the problems presented by Australia's diverse rail operating environment and has played a major role in breaking down barriers to harmonisation, and in encouraging states to work toward the development of common standards, practices and interoperability, wherever practicable.

1.39 The Australian Government, through DIRD, has played a central role in developing a national rail policy and supporting cross-jurisdictional regulatory bodies such as the RISSB to push for national standards. DIRD also provides financial support to the Australian Rail Track Corporation (ARTC) and provides funding to states and territories for rail projects.<sup>33</sup>

1.40 The ARTC, which was established in 1998 by the Australian Government (with support from the mainland state governments), manages and develops Australia's interstate track infrastructure as a single entity. The entity, which is wholly owned by the Australian Government, manages over 8500 km of standard gauge track. Most of this is through direct ownership and long term leases of state owned track between Kalgoorlie in Western Australia and Acacia Ridge in southern Brisbane.<sup>34</sup>

1.41 Through the ARTC's ownership and lease of the interstate line, the six separate state-based arrangements (which historically governed mainland interstate rail operations) have gradually been replaced with a single set of common rules, operating standards and access regulations. This represents a significant efficiency achievement – particularly for rail freight in Australia.<sup>35</sup>

1.42 DIRD has continued to work with state governments to coordinate change. With support from DIRD, and in consultation with other jurisdictions, the Victorian Government has been taking a lead role (on behalf of all jurisdictions) in the area of developing national rolling stock standards and a national rolling stock procurement approach.<sup>36</sup>

---

32 The Taig Review: TTAC Limited, *Review of the Rail Industry Safety and Standards Board and its MOU with the Governments*, June 2012, p. 16.

33 Department of Infrastructure and Regional Development, *Submission 14*, p. 2.

34 Department of Infrastructure and Regional Development, available at <https://infrastructure.gov.au/rail/trains/history.aspx>. (Accessed 19 September 2017.)

35 Department of Infrastructure and Regional Development, available at <https://infrastructure.gov.au/rail/trains/history.aspx>. (Accessed 19 September 2017.)

36 Department of Infrastructure and Regional Development, *Submission 14*, p. 21.

1.43 The Australian Government also has a role to play to encourage innovation in the rail manufacturing industry. Through the RMCRC, it has been able to facilitate collaborative research projects between industry and research institutions. The RMCRC provides the nationally coordinated approach to research – beyond policy initiatives that are being pursued by state governments – that is required from the Australian Government.

1.44 Infrastructure Australia has also had a role in coordinating the country's rail infrastructure. Infrastructure Australia's 2016 Infrastructure Plan and Priority List contain 93 specific projects targeted for completion over the next 15 years. More than half of these projects and initiatives (48) involve passenger and freight rail.<sup>37</sup>

### **Key issues**

1.45 In undertaking its inquiry into the state of Australia's rail industry, the committee undertook to investigate how government procurement, through the ARTC and other policy levers, can be used to achieve value for money and improve competitiveness, continuity of work, and the capability of the rail manufacturing industry.

1.46 The history of Australia's rail networks, coupled with the fact that they span large areas and operate across state boundaries, has, over the years led to a number of difficulties for the sector. The committee received evidence about the issues currently facing the sector, including the current barriers to competition and productivity – the solutions to which are complicated.

1.47 As part of its inquiry, the committee examined the regulatory environment under which the rail industry operates, and received evidence regarding the need for a national approach to standards. The report outlines the progress that has been made toward the harmonisation of the national rail network and stakeholders' views regarding ways to increase cooperation across the sector and increase Commonwealth and state commitment to harmonisation.

1.48 Overwhelmingly, evidence to the inquiry stressed the importance of the rail industry – both as a regional employer and an activity generator. The report examines the potential impact a further decline of rail manufacturing could have on both the national and regional economies and Australia's transport infrastructure.

1.49 Evidence to the inquiry indicated that Australia's need for additional transport infrastructure has led to an increase in Commonwealth and state investment across the sector. It was also observed that over the coming years, the growing Asia-Pacific markets will be looking for suppliers. The report outlines stakeholders' views in relation to how the industry – including manufacturers and suppliers – can take advantage of the growing markets (and the additional funding) to shape a world class industry which incorporates world class research and development, standards and technology.

---

37 Australasian Railway Association, *Submission 7*, p. 10.

## **Structure of the report**

1.50 The following chapter (Chapter 2) provides an overview of the current state of Australia's rail industry, including the regulatory environment and current procurement and local content guidelines. Chapter 2 provides an overview of the roles currently undertaken by the ARTC and the RISSB and outlines the progress that has been made in relation to the standardisation and harmonisation of Australia's rail network. The chapter also identifies some of the issues which currently act as barriers to productivity and restrict competitiveness and growth in the rail sector.

1.51 Chapter 3 expands on the importance of Australia's rail industry and the contribution it makes to Australia's economy. The chapter also outlines the consequences should there be a decline in the Australian rail manufacturing sector, and the impact any loss of capability could potentially have in relation to issues of transport infrastructure, access, regional employment and the Australian economy.

1.52 Chapter 4 reviews some of the barriers to growth and productivity which were identified by stakeholders, including the regulatory environment and the need for further investment in rail infrastructure. The chapter also examines the positive impact technology, national coordination, national procurement guidelines and cooperation between the Commonwealth and states could have on the sector. The chapter outlines some of the strategies proposed by stakeholders, and suggestions ways in which governments can support these strategies, to the benefit of the industry, at a national level.

1.53 Chapter 5 outlines the committee's view and includes a series of recommendations. The committee's recommendations are made with the aim of supporting the rail sector as it develops strategies to increase its productivity, competitiveness and capability through the implementation of workforce training, national standards, research and development and technology.