

AMWU submission to Senate Reference Committee on Rail Industry 2017



**AMWU submission to the
Australian Senate Rural and Regional Affairs and
Transport Reference Committee
Inquiry into the Rail Industry 2017**

***‘A major opportunity for jobs and economic growth:
national microeconomic reform of the Australian public
transport rail manufacturing sector’***

February 2017

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Executive and recommendation summary

- **The Australian public transport rail manufacturing sector is highly fragmented, inefficient and overdue for national reform.**
- **The potential economic and fiscal gains from reform are significant, but require a shared political resolve at both levels of government to pursue genuine microeconomic reform of State-based public transport rail procurement.**
- **An effective national approach does not involve a Commonwealth takeover, but rather a collaborative effort between leaders of the Federation to bring coordinated management and accountability to the sector, so it can perform at an efficient scale to generate Australian jobs and offer best value to taxpayers and public transport users. Promises to ‘harmonise’ the sector under current State-based arrangements have failed to deliver these outcomes.**
- **Commonwealth-led reform of the fragmented, state-based manufacturing sector could drive significant economic benefits, particularly through rationalisation of passenger rail procurement.**
- **There are productive national reform precedents to consider – and in particular the national reforms to rail freight in the 1990s. It is a key responsibility of the Commonwealth to pursue standardisation and efficiency in all matters of transport. Public transport is different from national rail freight reform, but the principle of standardising fragmented and expensive State-based manufacturing sectors is relevant, and highlights the nationally significant benefits that could be obtained from the rationalisation of passenger rail procurement.**
- **Taking a genuinely national approach to rail manufacturing would allow Australia to maintain and expand a strong, large-scale platform from which to make effective strategic decisions about sourcing transport infrastructure projects and maximising domestic labour content in railway manufacturing.**

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Recommendations

- 1. The Commonwealth government should take national leadership of this sector, rather than allowing substantially fragmented, uncoordinated arrangements to endure.**

- 2. Adopt a collaborative approach between state and federal governments to bring coordinated management and accountability to the sector. This will allow it to perform at an efficient scale to generate Australian jobs and offer best value to taxpayers and public transport users.**

- 3. The collaborative national approach must:**
 - include the harmonisation of product, component, signaling, power and manufacturing standards.**
 - adopt a more efficient, national view to matching demand for public transport to its supply across Australia's regions, facilitating timelier projects and less turbulent production lines which are better positioned to maintain standing workforces,**
 - promote the development of a realistic export industry for Australian passenger rolling stock, and**
 - promote the use of local content throughout the industry's supply chain.**

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Key objectives

Noting the Senate's published terms of reference for this inquiry, the AMWU's submission seeks to promote the following strategic outcomes in the Australian rail sector:

1. Maximised high-quality, sustainable Australian manufacturing jobs in rail; and
2. More profitable, competitive and sustainable local industry participants;

To achieve these outcomes, the AMWU believes the committee's efforts should be directed to consider efficient national public transport institutional arrangements which would:

- drive maximum efficiency in rolling stock procurement as well as manufacturing and maintenance arrangements nationwide;
- adopt a more efficient, national view to matching demand for public transport to its supply across Australia's cities, making for timelier projects and less turbulent production lines which are better positioned to maintain standing workforces;
- allow government to make strategic national decisions about retention of Australian labour content in this and other sectors, in the national interest;
- Help governments to consider public transport manufacturing and fixed infrastructure public transport projects alongside one another rather than considering the two matters in a more fragmented fashion; and
- promote the development of a realistic export industry for Australian passenger rolling stock.

The focus of the submission is public transport rail procurement, manufacturing and maintenance matters. In August last year, the AMWU prepared the "Reforms to save our public transport rail manufacturing sector" report. It goes into detail about the issues facing the sector and makes detailed recommendations to improve the productivity in the sector. A copy has been provided for the Committee's consideration.

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There are five Australian states with public transport rail manufacturing sectors: New South Wales, Victoria, Queensland, South Australia and Western Australia (in addition, the Australian Capital Territory is considering development of a light rail transit capability).

As each government has sovereignty over its own operations, there is no commonality or standardisation in public transport rail procurement, manufacturing, maintenance in Australia., As such, there is no national approach to assist states when rail building and maintenance choices are made for major public transport infrastructure projects that would provide best effect and least cost.

In these respects, the public transport aspects of rail are at risk of the inefficiencies brought about by lack of scale in manufacturing, lack of alignment in State design, strategy and procurement and lack of consistency in vehicle design and accreditation, etc.

All of these aspects add significantly to costs, promote unpredictable production schedules and ultimately threaten manufacturing jobs and sector productivity overall.

For these reasons, the AMWU is convinced that public transport rail is a sector overdue for microeconomic reform, in the best traditions of Australia's productive reforms.

Offering structural reform solutions, not just identifying the problem

Credible labour and economic gains on offer from a more productive industry are likely to be impressive, but the AMWU considers they will not be achieved without a commitment to decisive reform. As it stands, much of the inefficiency can be attributed to the fragmented nature of public transport manufacturing, leading to a sector that does not achieve economies of scale, lacks commonality and creates additional cost and risk which could be avoided. The *status quo* has not overcome such inefficiencies to date, 115 years after Federation.

Accordingly, this submission dedicates some time to considering the specific 'architectural arrangements' that stand the best chance of harvesting the modelled productivity gains. These views are provided with reference to the experience of less fragmented PT rail systems: such as those in the UK and the European Union. We also review the successful

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experience of past national reforms in Australian rail freight, which also addressed problems of standardisation.

Context: the industry and its growth prospects

Demand for public sector rail stock is in a growth phase

In its 2013 report for the Australasian Rail Associationⁱ, Deloitte found that State governments would purchase approximately \$30 billion dollars of public transport rail rolling stock between them over the 30 years to 2043 –this would reflect a demand for this rolling stock which would grow from around 4,000 cars nationwide in 2013 to almost 11,000 cars by 2043. This activity would be concentrated in both major metropolitan areas but also in regional centres such as Newcastle and Maryborough.

Since this report, the appetite for public transport rail projects has only increased. The market for public transport in rail is experiencing significant growth, as Australia – already one of the world’s more urbanised countries– continues to pursue more urbanisation. The growth in public transport recognises the economic reality that cities are major drivers of the national economy and that public transport has a significant role to play in facilitating efficient labour movement in cities. A recent study noted that the central business districts of Sydney and Melbourne –just 7.1 square kilometers in total area – accounted for almost 10 per cent of all economic activity in Australia.ⁱⁱ Even incremental improvements in transportation can bring major benefits to the economy and quality of life.

Recognising the value of public transport, when light rail projects are included there has been over \$46 billion dollars committed or planned for rail-based public transport projects in Australia over just the next decade:

Table 2: Major budgeted/planned PT rail/light rail projects to 2026

State	Project Title	Project Stage	Project cost
NSW	Sydney Metro North West	Due to open 2019	\$8.3 billion
NSW	Sydney Metro Project – Stage 2	Tender process has started to build the new twin Sydney Metro tunnels	\$6 billion

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		under Sydney Harbour and through the CBD for Stage 2 of Sydney Metro Expected to open from 2024	
NSW	CBD and South East Light Rail	Construction underway	\$2.2 billion
NSW	Newcastle Light Rail	Laing O'Rourke has commenced work as part of the design and construct contract for the Wickham Transport Interchange	\$2.1 billion (State Government funded)
NSW	Parramatta Light Rail	Community consultation	\$1 billion committed to explore options
NSW	New InterCity Fleet (NIF) Project Rolling Stock	Tender closed	\$2.8 billion (State Government funded)
QLD	Gold Coast Light Rail- Stage II	Awarded - design and construction commencing in mid-2016	\$420 million construction contract (QLD Govt investing \$270 million)
QLD	Cross River Rail	QLD Government establishing a Statutory Authority to deliver project	Estimated at \$5.2 billion
ACT	Capital Metro Light Rail Project	Preferred Consortia – Construction to begin in 2016	\$698 million
WA	Forestfield-Airport Link Project	Preferred Joint Venture - Construction will begin in 2016 with the first trains running on the line in 2020	\$2 billion (State Government funded)
VIC	New trains / trams	Live Tender	Melbourne Metro is out for tender The project was funded in the 2016-17 Vic state budget Construction timeline 2018-2026 \$1.3 billion for 65 new, high-capacity metropolitan trains with a minimum 50 per cent local content requirement. This includes a New maintenance facility East Pakenham
VIC	Melbourne Metro Rail Project- Enabling Works	The 2015-16 and 2016-7 State budget combined included a \$3.1 billion investment in new trains and 20 new E class trams for the network. \$257 million for 21 new Velocity regional carriages to be built at Dandenong	Estimated at \$10.9 billion

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		<p>This includes a New maintenance facility Geelong</p> <p>27 additional New Velocity trains for regional services (on top of the 21 above)</p> <p>10 new X'Trapolis trains to be built in Ballarat</p> <p>\$75 million to extend the life of more than 70 Comeng trains in the existing metropolitan fleet</p>	
VIC	Regional rail	Regional rail upgrades	\$1.3 billion for regional rail upgrades and infrastructure in 2016-17 budget

Source: Australasian Rail Association 2016

Will this demand be met efficiently?

The above table of planned investments is impressive, but it is concerning to the AMWU that each of the State customers are administering considerably separate and distinct arrangements for procurement, planning design and manufacture of rolling stock for each project. Public transport projects are rightly concerned with making major city economies work more efficiently and comfortably for the inhabitants. But one of the world's most respected urban transport economists, Professor Remy Prud'homme, has noted that:

'The greater productive efficiency of larger cities, however, is only potential. It is conditional upon the appropriate management of urban areas and particularly on the efficiency of the transport system'ⁱⁱⁱ.

Part of the way that governments can manage their major city transport more efficiently is by drawing upon a large-scale, integrated and efficient national rail manufacturing sector, rather than the current fragmented State-based sectors. This permits a much more efficient

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approach to rolling stock design, procurement and manufacturing. In turn, it promotes a far more competitive and sustainable local rail manufacturing sector.

The Economic Importance of Railway Equipment Manufacturing

Ample economic evidence attests to the significance of railway equipment manufacturing in Australia. A comprehensive summary of the strategic importance of the sector to the national economy was provided by the Centre for Future Work in a recent report.^{iv} Direct production and employment in the sector are significant: the industry directly accounts for annual sales of close to \$4 billion per year, value-added of close to \$1 billion per year, and about 5,000 direct jobs. But it is the indirect impact of the industry on other “upstream” and “downstream” sectors that magnifies its overall national significance. Railway equipment manufacturers purchase nearly \$2 billion of Australian-made inputs from other sectors of the economy (including goods, like metal products and electrical equipment, as well as services such as finance, scientific, and transportation services). Those input purchases translate into another 7,000 jobs in just the first tier of the industry’s supply chain: stimulating business and employment in all sorts of sectors across Australia. (These suppliers also purchase more inputs of their own, supporting even more jobs – but this analysis considers only the first-tier supply linkages.) Moreover, when Australians who are employed in railway manufacturing, and its suppliers, spend their incomes (on the whole range of goods and services which they use in their lives), they support another huge category of economic activity. Over 5,000 jobs in downstream consumer industries (from home building to retail and hospitality services) are seen to depend on the initial stimulus generated by the production in Australia of railway equipment.

These extensive direct and indirect economic effects are important context for considering optimal procurement decisions by Australian governments. Since railway manufacturing generates important economic linkages backward and forward into many parts of the economy, government decisions regarding procurement will also have important indirect effects on the level of economic activity in those sectors. It is only rational that these implications be considered in any fulsome cost-benefit analysis of alternative procurement

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options. The Centre for Future Work analysis suggests that the combined government sector (considering both the Commonwealth and state levels) receives revenue back into its own coffers equivalent to nearly 30 percent of the face value of a new procurement contract in this sector, resulting from the economic activity stimulated by domestic sourcing. Because of the impacts of domestic sourcing on employment, incomes, and hence tax revenues, governments cannot rationally pursue simply the “cheapest” options for its procurement decisions – all the more so during times (like the present) when the Australia economy and labour market are operating far below their full potential.^v The microeconomic reforms advocated in this submission, by facilitating both the standardisation and rationalisation of the sector, and integrating decision-making capacity across governments, would allow Australians to even more fully reap the potential economic and fiscal benefits of domestic sourcing.

Other economic modeling commissioned by the AMWU further confirms that the loss of this industry would impose a painful and needless blow to Australia’s national economy – including damaging the fiscal health of governments at all levels. Economic simulations using a dynamic computable general equilibrium (CGE) framework, developed by specialists at Cadence Economics and Juturna, tallied the direct and indirect implications of a shutdown of railway equipment manufacturing in Australia.^{vi} The total loss of production in this sector, along with indirect job losses experienced in supply industries and downstream consumer industries, would result in the elimination of nearly 20,000 jobs in total, the loss of \$1.5 billion in national GDP, and a decline in national incomes totaling \$1.75 billion. Clearly at a time in history when Australia is reorienting its economy (in the wake of the mining downturn), the loss of such a strategically important value-adding sector would be disastrous.

Where do inefficiencies occur?

Much has been written about the inefficiencies inherent in the public transport rail manufacturing sector. Through interviews, review of existing research findings and examination of similar challenges in other countries, the following broad categories of inefficiency in the State sectors can be identified:

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- 1. Fragmented and prescriptive design, procurement and componentry selection processes**
- 2. Turbulent, unpredictable demand for orders**
- 3. Lack of benchmarks, common standards, decision-making data and tools**

1. Fragmented and prescriptive design, procurement and componentry selection processes

Australia's States do not coordinate or benchmark their procurement efforts. A nationally coordinated approach could assist the states with the timing of tenders, the nature of the design and build specified, or in consideration of life of platforms in such a way as to bring down cost and risk through a longer-term, national pipeline for wagon builds that secured manufacturing employment and skills.

The initial demand analysis and business case development for new rolling stock procurement is an important juncture where choices around designs and standards will dictate componentry, cost and the impacts on potential overall efficiency. In 2011, UK train manufacturers, via the UK Rail Association, advised that the design phase represented around 8% on average of overall project cost, while decisions to select bespoke wagons with distinct componentry would add significantly more cost again^{vii}. Another UK rolling stock report from the same year found that around 5 per cent of costs would be saved simply by governments avoiding the temptation to change their policy and investment plans during the procurement process, leading to longer lead times and costlier tendering^{viii}. The Deloitte-ARA report in 2013 found that 50 per cent of total project costs are committed by the time governments complete the approvals, tendering and design phase.^{ix}

In 2014 Australia's Productivity Commission was clear that the early decisions of governments on planning, design and procurement require attention:

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'building a credible and efficient government and institutional framework for project selection is a critical and urgent task for governments'^x

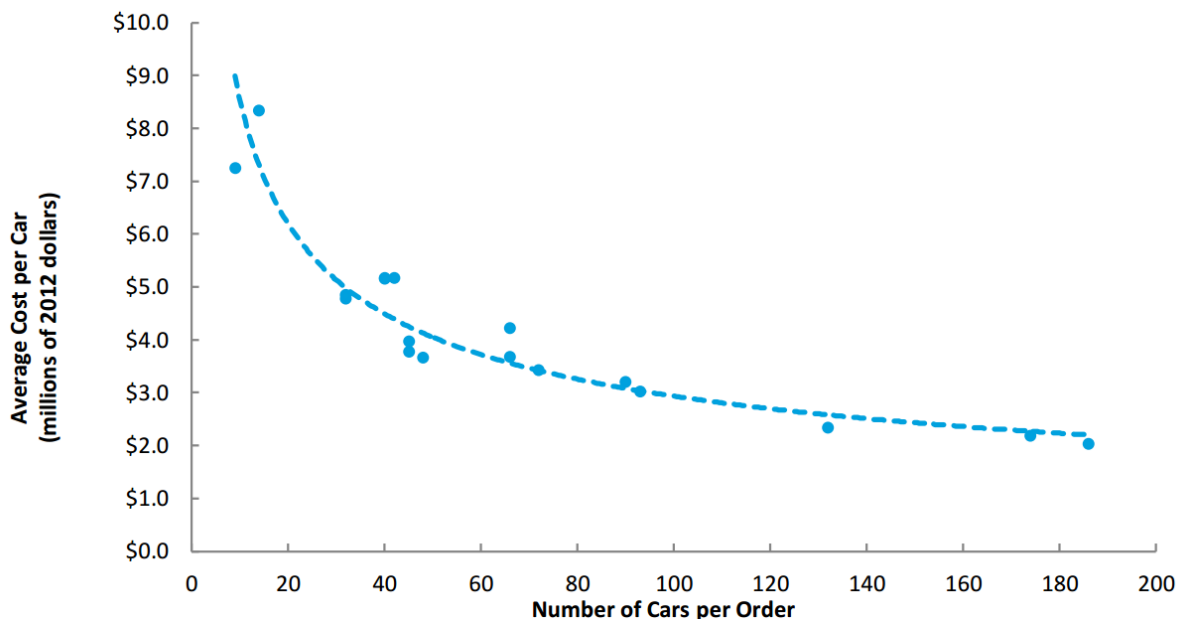
In public transport rail, the design phase of projects has involved a considerable degree of fragmentation in procurement choices, when viewed from a national perspective. The Deloitte-ARA report in late 2013 identified 36 different types of public transport trains in the 'Australian' public transit fleet. In addition, loading gauges – the outer dimensions of the trains which dictate how these vehicles interact with tunnels, platforms and overhead wires, etc – are far from consistent: a recent review of the Australian public transport market found that there were over 27 different loading gauge arrangements across the different State public transport rail networks^{xi}. Maintaining different wagons can create non-recurrent costs that are extremely damaging to both taxpayers and domestic manufacturers: the latter face the costs of maintaining multiple tooling lines to remain competitive for new orders. In the United Kingdom, the UK Rail Association estimated that the non-recurring costs of replacing just 16-20 wagon train types cost approximately \$130 million AUD per year in 2011 prices.

Such inconsistencies in early choices about design, standards and componentry also drive low-volume production batches, which in turn affect the viability of domestic production lines and make it difficult for domestic firms to retain their workforces in years of low or no production. Low-volume orders with high amounts of unique componentry lead to high build costs, which further challenge local firms.

Again the Deloitte-ARA report benchmarked the losses caused by small batch runs, which can in turn be attributed to a lack of sufficient coordination in procurement across State boundaries. As an example, increasing an order size from 50 to 150 wagons reduces the unit cost of the wagon build by 40 per cent, from \$4 million each to just \$2.4 million:

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Table 3: Impact of order size on the average cost per car (single-deck train example)



Source: Deloitte (2013)

To place this example in context, a 150-car order is not an unreasonable scale for Australia given that industry feedback at interview and supported by the Deloitte-ARA findings – was that annual wagon demand nationwide was in the order of 300 units per year.

A deeper cost of this approach is the impact on the major cost drivers of rolling stock and their ongoing maintenance liabilities. Fragmented approaches to such costly and significant equipment and design specifics as train control systems, braking choices, specified construction materials, motive power choices, vehicle dimensions as they relate to train platforms and tunnels (loading gauge) – even, given long enough reinvestment timeframes, to track gauge choices - are of vital importance: nationally-consistent approaches can reduce costs over time, supporting a stronger domestic industry and reducing the cost of providing public transport to commuters.

Interviews with some Australian producers raised the point that participating in each State tender for wagon building was a considerable cost. One manufacturer ventured that a typical tender effort could cost between \$3 to \$9 million. At times, there are clashes in tender timing between States, meaning in the short-run, some local manufacturers might be

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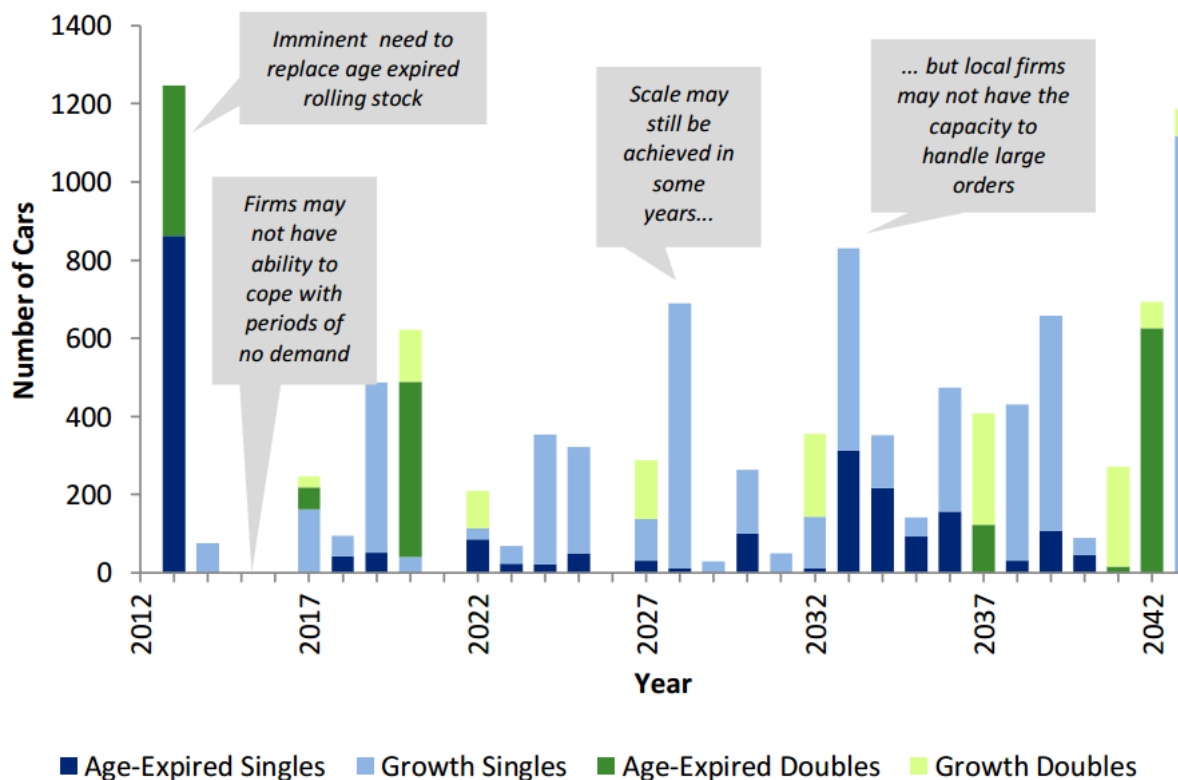
forced to forego bidding on some tenders, while in the long-run, local manufacturers are forced to spend more money on marketing in order to respond to all available work. The additional costs further place further pressure on manufacturer capacity to retain standing workforces during slow periods.

2. Turbulent, unpredictable demand for orders

Brief interviews conducted after the announcement of this inquiry confirmed the observed case in published research that the public transport wagon manufacturing sector has operated on a 'boom and bust' business cycle, with very high volume years sometimes followed with years where no orders are sought at all. The Deloitte ARA report outlines how this *status quo* approach is likely to impact the manufacturing sector over the next three decades, based on the 2013 assessment of future orders of both single and double-deck wagons of both the legacy and new generation types: the table below shows that under the current fragmented model, local manufacturers will continue to experience boom and bust, until very large order volumes start to arrive, at which point the local manufacturing industry may well be lost to a full import model:

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Table 4: Rolling Stock Orders under the Business as Usual Case



Source: Deloitte (2013)

By contrast, Deloitte-ARA modelling of an optimal scenario found that this same forward demand could be smoothed to produce a roughly steady procurement requirement of around 300 cars per year, which would be a productive outcome for local manufacturing and significant by world standards. A 300 car order pipeline should be seen in context: in 2011, UK rail manufacturers advised their government that they could obtain significant cost efficiencies if stable orders of around 150 cars of single design could be achieved^{xii}.

A more stable, efficient and predictable manufacturing pipeline allows local manufactures the lead times to tool and staff to major orders. Under current arrangements, the often haphazard and short-notice nature of State procurement and planning often means that major orders go to offshore producers which can better respond to *ad hoc* orders. The Deloitte ARA report made the point that:

‘There is increasing pressure on domestic rolling stock manufacturing and there exists a risk that all production could be sourced internationally’.

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In this sense, making a serious reform effort in this sector is not simply about harvesting vast new opportunities. It is also about preventing the loss of an increasingly challenged domestic manufacturing sector.

3. Lack of benchmarks, common standards, decision-making data, and tools.

In 2011 the McNulty review of UK rail^{xiii} considered that one of the main barriers to greater efficiency was:

‘the poor quality of data available to support whole life cost decisions, or the fact that the data available in various parts of industry appear not to be available to decision-makers prior to key planning decisions’.

When compared to the UK industry - which was opened to above-rail commercial operators since the mid-1990s and has a single national track owner with a common track gauge, the information challenge facing the fragmented Australian public transport rail states should be considered even more challenging and in need of reform. This was certainly the view of Mr Tony Taig, an eminent international rail figure who reviewed the Australian Rail Industry Safety and Standards Board for Australia’s transport ministers^{xiv}. Taig found that Australian rail safety and standards arrangement:

‘lacks focus on the economic and safety outcomes sought from standards and harmonisation’ and that:

‘No-one in Government has a clear focus on measuring and maximising nationally the benefits of harmonisation’.

At the same time, Taig expressed surprise at the almost complete lack of common approaches across Australian State rail systems:

‘A major driver for the establishment of European Technical Standards for Interoperability has been to increase the scale of the markets available into which European manufacturers

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can supply. In many ways Australia almost seems to “out-Europe Europe” in terms of how different the railways are from those in adjoining territories. While there may be short-term pain in adapting to more harmonised standards, the long-term benefit for the supply industry would be considerable’.

Taig found that *‘the benefits of harmonisation should be considerable, with safety risks mitigated and potential for \$100s to \$1000s of millions savings annually on railways across Australia’.*

Other benefits come from a funded commitment to centralised excellence in researching standard systems, designs and equipment which can inform procurement choices in different places. The European Union’s MODTRAIN project sought to develop collaborative open standards for all aspects of train design, with a focus on modular design and reduction in parts employed in the build process. The project reported a 15 per cent reduction in manufacturing costs^{xv}. A central and authoritative body in such roles also allows for continuous measurement and feedback to drive nationwide improvements.

In the United States, the US Transit Cooperative Research Program within the Transportation Research Board – part of the US National Academies of Sciences, Engineering and Medicine in Washington DC – acts as a genuine centre of excellence in research, benchmarking, systems design and demand forecasting techniques, among other things. This exerts a harmonising and optimising effect on the many different public transport systems across US major cities and it acts as a source of much-needed skill development in the complex field of public transit economics and planning.

Australia lacks such arrangements: although it possesses the Rail Industry Safety and Standards Board, the Taig review of this body made it clear that this body performs well, but it entirely lacks the necessary authority to act in this space and influence authoritative change across the States. That there has been no demonstrative change in this respect since the Taig report was presented to transport ministers in 2013 suggests a *‘status quo’* culture which has little appetite for reform.

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Benefits of reforming a fragmented economic sector

What level of productivity gains should be expected in the course of reforming and streamlining Australia’s fragmented public transport rail manufacturing sector? The AMWU considered available comparable studies of productivity gains to the sector. Some of the gains were restricted to particular aspects of sector productivity, others were more comprehensive, as the following table illustrates:

Table 5: Passenger rail procurement & manufacturing: comparative productivity gain estimates

Study	Estimated annual available productivity gains	Comprising gains in	Comment
Deloitte Australia 2013 Greater Passenger Rolling Stock Procurement Efficiency	19%	<ul style="list-style-type: none"> • Optimising trains per order • Harmonised and smoothed production levels • Reduced heterogeneity • More market involvement in design standards • Smoothed funding for major procurements 	<p>Assumes a harmonised approach across the PT rail States without an observed case of any shared progress in this respect.</p> <p>The key gains stated in the Deloitte report were limited to a) scale; b) smoother demand; c) planning and design; and d) componentry harmonisation (cf. p. 6). Efficiencies from standardised, strategic national procurement practice does not appear to have been modelled, yet this was an area highlighted by industry at interviews for this submission as a major source of inefficiency.</p>
ARUP UK (2011) Rolling Stock Whole Life Costs	Between 17-28%	<p>Gains in strategy and planning - 20%</p> <p>Gains in specification and procurement (in build years) – 5%</p> <p>Gains from options evaluation before procurement decision – 18%</p>	Assumes some data, tools and skills investments to realise benefits
TTAC (2012) Review of Australian Rail Industry Safety and Standards Board	Up to a nominal 30%		While ostensibly a safety standards review, the Taig Report provided expert opinion (after extensive observation) that greater standardisation/harmonisation would create annual economic savings

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			between the hundreds of millions to billions of dollars. Taig found the Australian sector to be highly fragmented and advised in terms of economic benefits available that <i>'I have no doubt that lack of harmonisation adds somewhere between a few % and a few tens of % to the cost of railway goods and services in Australia and potentially substantially more where interoperability is an issue'</i> .
UK train manufacturers <i>via</i> UK Rail Industry Association (2011)	8% of cost saving	Associated with bespoke (non-recurrent) design and development costs.	
EU MODTRAIN project	15% cost saving	Common manufacturing standards and designs	
UK train manufacturers <i>via</i> UK Rail Industry Association (2011)	20% cost saving	Based on examination of all orders between 1988-2010, compared to counterfactual scenario where continuity was available for orders	

The Deloitte report arrived at a 19% gain but this report did not appear to place substantial emphasis on the high-cost and uncertain tendering processes under the current State-based system.

The Deloitte assessment of 19% also assumes that in the short-term, States will remain in control of their own PT arrangements and merely work to 'harmonise' efforts over time, by each developing their own harmonised State public transport rolling stock strategies^{xvi}. While technically reasonable, there is little observational basis for this to be considered effective: for example, rail coach building 'harmonisation' was agreed as a priority area for reform in the 2009 Council of the Australian Federation meeting, but since this time no major updates have appeared on progress and Taig made the point in 2012 that there was almost no data available on the amount of spending on PT by State, let alone agreed

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standards and benchmarks. The lack of serious ministerial action in response to Taig's report was itself telling.

This submission argues that the current harmonisation approach has failed to deliver to date and, in particular given the views of Taig's review of the sector in 2013, could not be considered a reliable path to Australian reform of PT rail manufacturing. Under *status quo* arrangements there appear to be structural barriers to the achievement of even the 19 per cent Australian market gains proposed in the Deloitte report. Yet if the important structural deficiencies are tackled 'head-on' the gains appear large.

Analysis by ARUP in 2011 advised gains of 17 to 28 per cent were on offer to the UK's rail manufacturing sector. These gains would come from a market far less fragmented than the Australian State PT jurisdictions, with certain efficiencies already inherent in the UK which are not available in Australia: for example, UK above-rail services were privatised over 20 years ago and coach-leasing firms are already in place to smooth the fiscal challenges to acquiring new rolling stock at the right time; there is a single national below-rail owner (Network Rail) in place for almost all UK track, operating on a common track gauge; although there are many different wagon types still in existence on the UK network, this number is being reduced actively and the UK has an agreed program in place for increased homogeneity (for example, the Network Rail rolling stock strategy recommends a move to just 5 broad classes of train in future, with common motive power, etc). In this sense, given the much lower base of efficiency that the atomised Australian structure begins from, a 25-30 per cent productivity gain appears fully plausible for Australia.

A more ambitious and likely productive approach could come from a move to fully standardise PT rail procurement, manufacturing and maintenance through a national model of cooperative management and ownership, probably with multiple State and Commonwealth shareholders, as per national freight rail reform in Australia in the early 1990s; this would also align the sector with the national standards that govern civil aviation, or maritime safety. This would also better align with the UK and French national models, for example.

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Securing the gains: what will secure the industry's jobs future?

Reform means resolve

The AMWU seeks action from governments that translates to local manufacturing job growth and a more sustainable domestic sector, as quickly as practical. In 2011, leaders of the UK rail sector approached further national reforms and standard approaches to their industry by acknowledging the complexity of the task, but noting that:

'Extreme complexity, however, is no reason for inaction, inertia or quiescence...The need safely to drive inefficient cost out of the industry is paramount. This strategy concludes that over the next two generations of rolling stock, potentially hundreds of millions of pounds could be saved'.^{xvii}

The AMWU believes previous research provides clear evidence that the potential benefits to national productivity to be nationally significant, but particularly in the communities where the manufacturing facilities are located..

A logic test: would the UK sector adopt the current 'Australian' model as a solution?

To consider how to move forward, the Senate Inquiry might care to consider the current UK industry and a counterfactual: would the UK – a public transport market around three times the size of Australia's– wish in the interests of efficiency to split itself into five or more substantially-autonomous government public transport entities, which would largely pursue their own rolling stock plans, designs and procurement programs, without recourse to a common set of standards and objectives, acting to some degree as separate economies with no need to publish their results and measure their efforts against one another? The proposition is ludicrous. This should serve to underline the urgency of doing better in the Australian context and not accepting vague undertakings as an acceptable reform solution.

A national approach, with standardisation as a national objective

The AMWU takes a practical view as to how change might best be achieved. Its view is informed by the Australian Constitution itself, where the Commonwealth has a head of

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power in the standardisation of transport outcomes in rail. This submission underlines the overdue need for pursuing such outcomes.

A blueprint for practical improvements: Hawke-Keating National Rail Freight reforms

In considering how the gains on offer in public transport manufacturing reform might best be secured, the AMWU believes that the Inquiry should carefully consider the blueprint of breakthroughs achieved through the national reforms to the interstate rail freight industry by the Hawke and Keating governments in the late 1980s and early 1990s. Some detail is worth considering in this respect.

The National Rail Corporation came about in 1991 because the Hawke Government's Interstate Commission had, amongst other things, made the improvement of national rail freight a priority for attention. In doing so, the leaders of the States, Territories and the Commonwealth were acknowledging that not all *status quo* State-based arrangements were working effectively for rail freight.

National Rail Corporation legislation was facilitated by an agreement of State and Territory Governments *via* the Special Premiers' Conferences in 1991. It is worth noting that this decision was a matter for Premiers. It was not referred to transport ministers, as has been the case in the fragmented public transport sector to date. It is also important to appreciate that this did not represent a Commonwealth 'takeover' of rail freight. Instead, assets were transferred to a corporation in which Commonwealth and States became equity shareholders^{xviii}. Importantly, the corporation was also required to operate under 'best practice' labour arrangements, under a special award.

While national rail freight in Australia is still not perfect, it is beyond dispute that the Hawke-Keating national rail freight reforms repositioned this sector for a more productive future.

Given the significant gains that this submission has presented as being on offer to public transport, it is again time for Australia's political leaders to consider a national reform which places this sector on a better footing for confronting the future.

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The AMWU is well aware that the aforementioned approach will be controversial and can be expected to meet opposition from elements of the *status quo*.

As to industry's view on a preferred reform structure, the AMWU will leave companies to provide their own views on these matters.

However, the AMWU would ask the Inquiry to be cautious of arguments which assert that the National Rail freight reforms are not appropriate as a reform template for public transport. It might be asserted that the rail freight reforms were all about 'break of gauge' and as such they are of no relevance for doing better in public transport. The AMWU submits that such arguments would be ill-informed: the point of any national transport reform is to move to standardise the practices of members of the Federation and in so doing improve matters for all. This was the intent and structure of the Hawke-Keating national rail freight reforms. Public transport deserves a similar collegiate approach to reform, where all parties are equity partners in a reliably better outcome.

Wider benefits of national reform in PT rail manufacturing

In closing its submission, the AMWU draws the Senate committee's attention to two important dividends that are likely to flow from a genuinely national approach to public transport rail procurement, manufacturing and maintenance:

- 1. A whole-industry, whole-life cost approach can link rolling stock with fixed infrastructure.**

One of the drivers of further public transport manufacturing reform in the United Kingdom and the European Union is that rolling stock and the infrastructure it runs on can begin to be planned, designed and delivered together, rather than as related but largely fragmented processes. Pairing a national view of rolling stock production with a clear and detailed national assessment of public transport infrastructure projects should result in more timely projects and better government priority setting in its infrastructure pipeline.

- 2. Reform will provide Australian governments a better strategic position from which to make effective decisions about local manufacturing content.**

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The lack of a truly national, efficient industry prevents a truly strategic assessment of local content and how to achieve practical national outcomes. The existence of a national sector with national metrics allows governments to deal with the question of local content more strategically than through many fragmented parties.

In the long run, the AMWU considers taking a more national approach to rail manufacturing could allow the local content questions in this sector to be paired with local content decisions across other nationally-significant sectors such as mining, construction and especially Defence. Many of the core manufacturing skill sets are common across all of these sectors. Moving to a more national for public transport rail manufacturing will allow future governments to examine local manufacturing labour content in a far more strategic way, in the national interest.

AMWU point of contact for this submission:

**Mr Glenn Thompson - Assistant National Secretary
Mobile 61 419 689 932**

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Endnotes

ⁱ Deloitte for Australasian Rail Association *Opportunities for Greater Passenger Rolling Stock Procurement Efficiency* (2013)

ⁱⁱ Jane-Frances Kelly and Paul Donegan *Mapping Australia's Economy: cities as engines of prosperity* Grattan Institute (2014)

ⁱⁱⁱ Emeritus Professor Remy Prud'homme *Urban Transport and Economic Development* a paper for the 7th conference on the development and planning of urban transport in developing countries, New Delhi (1996)

^{iv} See Jim Stanford, Penny Wise and Pound Foolish: The Economics and Fiscal Costs of Offshoring Public Procurement (Canberra: Centre for Future Work at the Australia Institute), 32 pp., September 2016.

^v An unfortunate example of this sort of short-sighted thinking was provided recently by the NSW State government's decision to source a \$2.3 billion contract to manufacture and service new passenger rail cars from South Korea, instead of building them at home. The State Transport Minister's claim that this decision would "save" taxpayers money ignores the implications of domestic sourcing for employment, income, and government revenues. See Matt O'Sullivan, "Locals lose out as \$2.3b NSW intercity train fleet to be built in South Korea," Sydney Morning Herald, August 18, 2016, <http://www.smh.com.au/nsw/contract-for-new-trains-for-nsw-intercity-fleet-to-be-built-in-south-korea-20160818-gqv9rj.html>.

^{vi} These simulation results, and the methodology utilised in the modeling, are described in detail in the companion document, *Reforms to Save Our Public Transport Rail Manufacturing Sector* (Sydney: Australian Manufacturing Workers Union, 2016).

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^{vii} UK Rail Association figures quoted in Network Rail UK *Rail Utilisation Strategy: Passenger Rolling Stock* (2011)

^{viii} ARUP UK *Rolling Stock Whole Life Costs* a research paper in support of the McNulty Rail Value for Money Study (2011)

^{ix} Deloitte for Australasian Rail Association *Opportunities for Greater Passenger Rolling Stock Procurement Efficiency* (2013) p.16

^x Productivity Commission *Inquiry into Public Infrastructure* Vol 1 No 71 (2014)

^{xi} Taig, Tony, *Review of the Rail Industry Safety and Standards Board and its MoU with the Governments* a report for Australia's Standing Council on Transport and Infrastructure (2013)

^{xii} Network Rail UK *Rail Utilisation Strategy: Passenger Rolling Stock* (2011) p. 54

^{xiii} UK Department for Transport and Office of Rail Regulation *Realising the Potential of GB Rail* Final Independent Report of the (McNulty) Rail Value for Money Study (2011)

^{xiv} Taig, Tony, *Review of the Rail Industry Safety and Standards Board and its MoU with the Governments* a report for Australia's Standing Council on Transport and Infrastructure (2013)

^{xv} European Union *On Track to a Sustainable Future: EU-funded research for a safe and efficient European Rail system* (2010) p.16

^{xvi} Deloitte for Australasian Rail Association *Opportunities for Greater Passenger Rolling Stock Procurement Efficiency* (2013) p.7

^{xvii} Network Rail UK *Rail Utilisation Strategy: Passenger Rolling Stock* (2011) p. 3

^{xviii} See Commonwealth Parliamentary Research Service *Rail and Urban Public Transport: Commonwealth Funding and Policy Issues* Research Paper No 12 (1994)