



15 December 2021

Committee Secretary  
Senate Standing Committee on Economics  
Department of the Senate  
Email: [Economics.Sen@aph.gov.au](mailto:Economics.Sen@aph.gov.au)

Dear Committee Secretary,

Re: Senate Inquiry into Australian Manufacturing.

Thank you for the opportunity to share the experiences of our hardworking AMWU delegates with the Committee about what they believe the future of the Australian manufacturing industry can look like. The AMWU believes that a vibrant, growing manufacturing industry will help provide the good quality jobs that our country needs over the coming years.

Please find below the answers to the questions that were provided to us on notice.

*Q1. You've called for the establishment of a Manufacturing Industry Fund to assist local manufacturing businesses to invest in new advanced production technologies through the provision of low-interest finance, government share capital, loan guarantees and other mechanisms. This would represent a significant but not unprecedented role for government in supporting industry development, and in some ways, would resemble what is already happening in other areas, such as through the Clean Energy Finance Corporation.*

The AMWU believes that no Australian company, at any stage of its development – from start-ups to large firms – should be required to move off-shore to secure the capital and support that they need to grow. We believe that the CEFC is a good model for how this can work for companies of certain sizes, but other models will need to be implemented for smaller firms. One size will not fit all.

As we've seen with the CEFC, government can play an important role in facilitating private sector investment. The Australian manufacturing industry – and the millions of Australian families and regional towns that rely on it – will benefit from additional investment in this vital industry.

The Manufacturing Industry Fund (MIF) that we envisage is not simply the government handing out gifts or grants to businesses looking for assistance. The MIF is about delivering strategic co-investment between government and private industry through equity, concessional loans, guarantees and other means which ensure that the MIF receives a return on its investment in these firms as they grow. Our vision is that these returns can be reinvested to ensure the long-term future of the manufacturing industry in Australia.

Australian Manufacturing  
Workers' Union  
Registered as AFMEPKIU  
**National Office**  
Level 4  
133 Parramatta Road  
Granville NSW 2142  
Telephone: 02 8868 1500  
Facsimile: 02 9897 9274  
[amwu@amwu.asn.au](mailto:amwu@amwu.asn.au)

The COVID pandemic has shown the fragility of global supply chains and nations around the world are investing heavily in their domestic manufacturing industries. As the global response to climate change gathers steam, millions of jobs will be created around the world. Without government support, those high-skill, high-wage jobs will go offshore and this golden opportunity for a manufacturing-led response to COVID and climate change will have been missed.

*Q2. Is your proposal for a 'Manufacturing Industry Fund' trying to resolve specific challenges that exist in private markets, for example, manufacturers having trouble accessing finance and capital, or is it more targeted at lowering costs for domestic manufacturers to help us become more globally competitive?*

As part of the AMWU's involvement in the National COVID Coordination Committee, we recommended fundamental reforms to the scale and type of support provided to the manufacturing industry. Sadly, those recommendations were ignored in favour of the "gas-led recovery" which will support only a tiny fraction of the domestic manufacturing industry (while locking in higher emissions and placing many times that number of jobs at risk across the industry) and a business-as-usual approach to industry policy being adopted by the Department. The Modern Manufacturing Initiative and associated Funds are too small to make a material difference to the size and shape of our domestic manufacturing industry and fall well short of what is needed to reform our industry.

Our proposals are to develop tailored programs for each stage of development across the development cycle. While access to capital is vitally important, genuine industry development involves assisting local business to access collaboration opportunities, skilled workers, business expertise, training and other resources to help them grow while staying in Australia. All led by a genuine tripartite governing body that has the long-term interests of our industry and our nation at heart.

We believe that innovation will drive Australia's global competitiveness – we don't believe a race to the bottom on prices is one that we want to win. We need to invest in the latest capital equipment, the most modern techniques, and the highest skilled and most productive workforce if we want to build an industry that will stand up to the challenges that it will face in the 21<sup>st</sup> century.

*Q3. Regarding innovation, your submission called for an urgent reform of R&D tax credit, on the basis that the existing system was not sufficiently increasing economic complexity and innovation with the manufacturing sector. You've also called for accelerated depreciation provisions for intellectual property, to turbo-charge innovation across the sector.*

It is widely accepted that the current R&D tax credit is no longer fit for purpose. The attempt of the government to reform it by rewarding those firms with higher "research intensity" would have harmed those firms who wanted to scale up in Australia (and those that already operate at scale here). We need to encourage firms that turn Australian ideas into Australian jobs.

We look forward to working with the government to design a better tax system that rewards companies that invest in Australia, while ensuring that large firms still pay their fair share of tax.

*Q4. What changes would you like to see made to Australia's R&D tax system to help boost innovation and economic complexity, and related to that, could you expand a bit on your proposal for accelerated depreciation provisions for intellectual property, and the problem that those provisions would be trying to overcome?*

The AMWU made a submission to an inquiry held by this committee in March 2020 with our views on reform to the R&D tax incentive, which we have attached to this letter.

*Q5. Like many other submissions to this inquiry, you have called for stronger local procurement provisions, and also, a prioritisation of local employment in procurement. Earlier today this inquiry heard from the Australasian Railway Association, which argued in favour of local procurement provisions, but cautioned against them being state based. So for example, NSW adopting a policy that would restrict locally produced content from Victoria, or vice-versa.*

All the heavy lifting on procurement policies that deliver local jobs and develop local businesses is being done in the states, as the federal government has failed miserably in this policy area. So, it is not surprising to see that most of the procurement policies that require local content are focused on state-based targets. A genuine national approach to the use of procurement would help to alleviate the state-centred approach that we have at the moment. For example, a national approach might see state 1 happy to purchase their trains from state 2, if the national policy would require that state 2 to purchase their wind turbines from state 1. This would help to deliver better bang for the taxpayer dollar, while still driving the creation of local manufacturing jobs.

However, the complete failure of the Commonwealth government to take any sort of leadership role has left a fractured approach to government procurement. Not only does the Commonwealth government seem determined to spend all of its money creating jobs overseas, it is dismissive of state-based efforts to foster their local industries.

On the specific issue of rail manufacturing, the Senate held an inquiry into the state of the industry in 2016/17 and the government has done nothing to further the findings within the report. The AMWU's submissions to that inquiry are attached.

*Q6. Do you have any views on the distinction between state based and national based local procurement rules? And if state-based local procurement are implemented in larger states, what challenges do you think this creates for smaller states and territories?*

While there are no perfect procurement policies, the AMWU supports all efforts to ensure that government spending is targeted at delivering local jobs and training. As mentioned above, we would support a national approach to procurement that delivered national sovereign capability, allowing for specialisation and scale to be developed within individual states.

In the absence of national leadership on this issue, we have no doubt that the states will continue with their successful policies that have delivered high skill, high wage jobs, particularly in regional communities. The AMWU will continue to campaign for improvements where these procurement policies don't exist.

*Q7. At the recent October 2021 Senate Estimates, the Department of Defence revealed that plans for the local construction of a Pacific Support Vessel had been scrapped in favour of an overseas purchase, which was not publicly announced by the Government. What did this Morrison Government decision mean for your members?*

This decision is yet another disappointing chapter in the Commonwealth Government's attack on Australian shipbuilding workers and the role that they play in keeping Australia safe. It will see skills shortages, move jobs offshore and will result in yet more missed opportunities to develop export industries in high value products. The AMWU put out a statement when this information became public, which can be read here: [https://www.amwu.org.au/morrison\\_govt\\_secretly\\_dumps\\_wa\\_ship\\_build](https://www.amwu.org.au/morrison_govt_secretly_dumps_wa_ship_build)

*Q8. Do decisions such as this give you much confidence in the Government's commitment to local manufacturing?*

No. Despite repeated efforts over the life of the Abbott-Turnbull-Morrison government the manufacturing industry is clearly an afterthought for this government. From the closure of the car industry to the cancelling of the submarine contract the AMWU and its members have repeatedly seen our industry failed by this government. Sadly, we do not expect that will change. Lip service cannot replace genuine industry policy.

If you would like to discuss this matter in more detail, you can contact [REDACTED] or [REDACTED] in the first instance.

Yours sincerely,

[REDACTED]



6 March, 2020

Senate Standing Committees on Economics  
PO Box 6100  
Parliament House  
Canberra ACT 2600

Email: [economics.sen@aph.gov.au](mailto:economics.sen@aph.gov.au)

Dear Secretary,

Re: Senate Inquiry into the Treasury Laws Amendment (Research and Development Tax Incentive) Bill 2019

The Australian Manufacturing Workers' Union (AMWU) represents over 70,000 workers who create, make and maintain in every city and region across Australia. The workers we represent are employed by companies that engaged in Research and Development (R&D) to improve their products and services so that they can improve productivity, grow their market and export Australian-made goods to the rest of the world.

### **Reduction in support for R&D sends the wrong message**

The Treasury Laws Amendment (Research and Development Tax Incentive) Bill 2019 (the Bill) will discourage investment in R&D in Australia, leading to some companies shifting these highly skilled, highly paid positions overseas, or abandoning them entirely. This will lead to lower productivity growth, a less a competitive Australian manufacturing industry, less investment in new and upgraded capital and, in the long run, fewer jobs and poorer wages for Australian workers.

The government's attempt to save money by reducing the effective rate of R&D tax credit for most Australian businesses has no basis in sound policy. Australian was recently ranked 93<sup>rd</sup> in the world in Harvard University's Atlas of Economic Complexity, despite being the 14<sup>th</sup> largest economy. This is an indictment on decades of industry and trade policy which have emphasized the export of minerals and agricultural goods at the expense of developing a sophisticated manufacturing sector.

These changes will only further cement our place at the bottom of the economic complexity ladder, leaving our economy vulnerable to a future in which our primary products are not as valuable on the global market.

Australian Manufacturing  
Workers' Union  
Registered as AFMEPKIU  
National Office  
Level 4  
133 Parramatta Road  
Granville NSW 2142  
Telephone: 02 8868 1500  
Facsimile: 02 9897 9274  
[amwu@amwu.asn.au](mailto:amwu@amwu.asn.au)

### **Intensity test punishes local manufacturers**

The Bill punishes companies that have a large local operation, by discounting their R&D tax credit if they are not sufficiently "research intense." This will place our members jobs in jeopardy because it actively encourages local businesses to move their manufacturing operations offshore.

This means that operations which undertake R&D in Australia and then turn that investment in new technologies, processes or products into Australian jobs will receive less support than companies that undertake R&D here but produce their goods overseas.

This is bad for local businesses and bad for local manufacturing jobs.

### **Recommendations**

The AMWU encourages the Committee to recommend that the Bill not proceed in its current form. The Bill is largely unchanged from a similar version presented to the last parliament which the Committee recommended that the Bill be deferred for further consideration. It is our view that the new version of the Bill still contains many of the same defects as the previous version.

While there is merit to the suggestion that the R&D tax credit system needs to be reformed to ensure that it remains targeted and effective, this Bill does not deliver that.

The AMWU encourages the government to withdraw the legislation and engage in genuine consultation with employers, employees and their representatives about the best way to ensure a strong, diverse, cutting edge manufacturing sector now and into the future.

Yours sincerely,



PAUL BASTIAN  
NATIONAL SECRETARY

**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**



## AMWU submission to Senate Reference Committee on Rail Industry 2017

### 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.



## **AMWU submission to Senate Reference Committee on Rail Industry 2017**

### **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.**

## **AMWU submission to Senate Reference Committee on Rail Industry 2017**

### **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.

## **AMWU submission to Senate Reference Committee on Rail Industry 2017**

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

## AMWU submission to Senate Reference Committee on Rail Industry 2017

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 Association<sup>i</sup>, 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.<sup>ii</sup> 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

**AMWU submission to Senate Reference Committee on Rail Industry 2017**

		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<sup>iii</sup>.*

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

## **AMWU submission to Senate Reference Committee on Rail Industry 2017**

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.<sup>iv</sup> 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.<sup>v</sup> 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.<sup>vi</sup> 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:

## **AMWU submission to Senate Reference Committee on Rail Industry 2017**

- 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<sup>vii</sup>. 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<sup>viii</sup>. 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.<sup>ix</sup>

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’<sup>x</sup>*

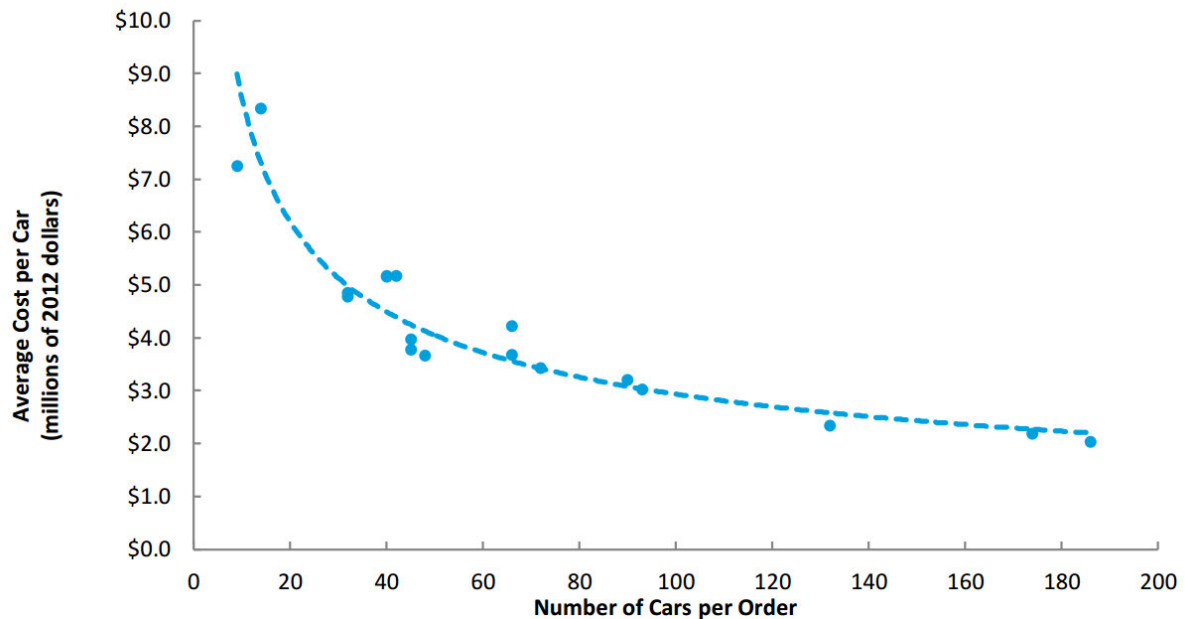
In public transport rail, the design phase of projects has involved a considerable degree of fragmentation in procurement choices, when viewed from a national perspective. The Deloitte-ARA report in late 2013 identified 36 different types of public transport trains in the ‘Australian’ public transit 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<sup>xi</sup>. 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

## **AMWU submission to Senate Reference Committee on Rail Industry 2017**

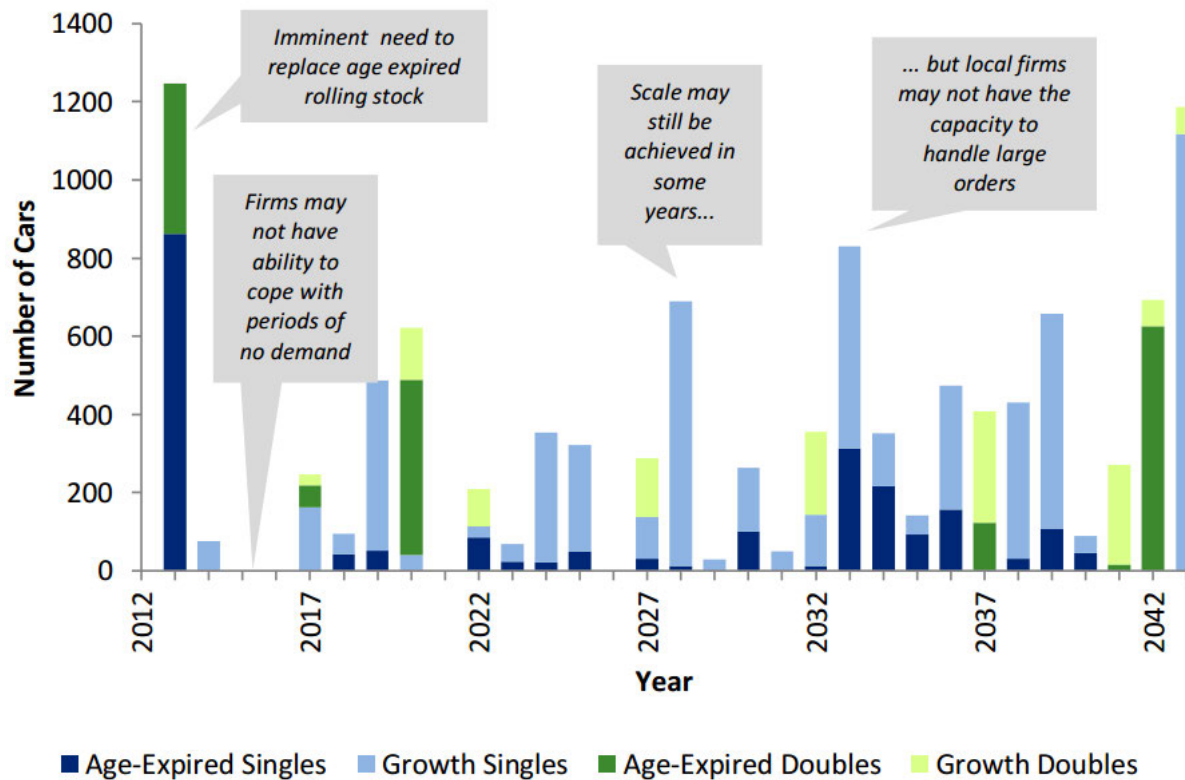
forced to forego bidding on some tenders, while in the long-run, local manufacturers are forced to spend more money on marketing in order to respond to all available work. The additional costs further place further pressure on manufacturer capacity to retain standing workforces during slow periods.

### **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:

## AMWU submission to Senate Reference Committee on Rail Industry 2017

**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<sup>xii</sup>.

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<sup>xiii</sup> 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<sup>xiv</sup>. 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<sup>xv</sup>. 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"> <li>• Optimising trains per order</li> <li>• Harmonised and smoothed production levels</li> <li>• Reduced heterogeneity</li> <li>• More market involvement in design standards</li> <li>• Smoothed funding for major procurements</li> </ul>	<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<sup>xvi</sup>. 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'.<sup>xvii</sup>*

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

## **AMWU submission to Senate Reference Committee on Rail Industry 2017**

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<sup>xviii</sup>. 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.

## **AMWU submission to Senate Reference Committee on Rail Industry 2017**

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.

16 February 2017

## Endnotes

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

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

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

<sup>iv</sup> 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.

<sup>v</sup> 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>.

<sup>vi</sup> 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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<sup>vii</sup> UK Rail Association figures quoted in Network Rail UK *Rail Utilisation Strategy: Passenger Rolling Stock* (2011)

<sup>viii</sup> ARUP UK *Rolling Stock Whole Life Costs* a research paper in support of the McNulty Rail Value for Money Study (2011)

<sup>ix</sup> Deloitte for Australasian Rail Association *Opportunities for Greater Passenger Rolling Stock Procurement Efficiency* (2013) p.16

<sup>x</sup> Productivity Commission *Inquiry into Public Infrastructure* Vol 1 No 71 (2014)

<sup>xi</sup> 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)

<sup>xii</sup> Network Rail UK *Rail Utilisation Strategy: Passenger Rolling Stock* (2011) p. 54

<sup>xiii</sup> 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)

<sup>xiv</sup> 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)

<sup>xv</sup> European Union *On Track to a Sustainable Future: EU-funded research for a safe and efficient European Rail system* (2010) p.16

<sup>xvi</sup> Deloitte for Australasian Rail Association *Opportunities for Greater Passenger Rolling Stock Procurement Efficiency* (2013) p.7

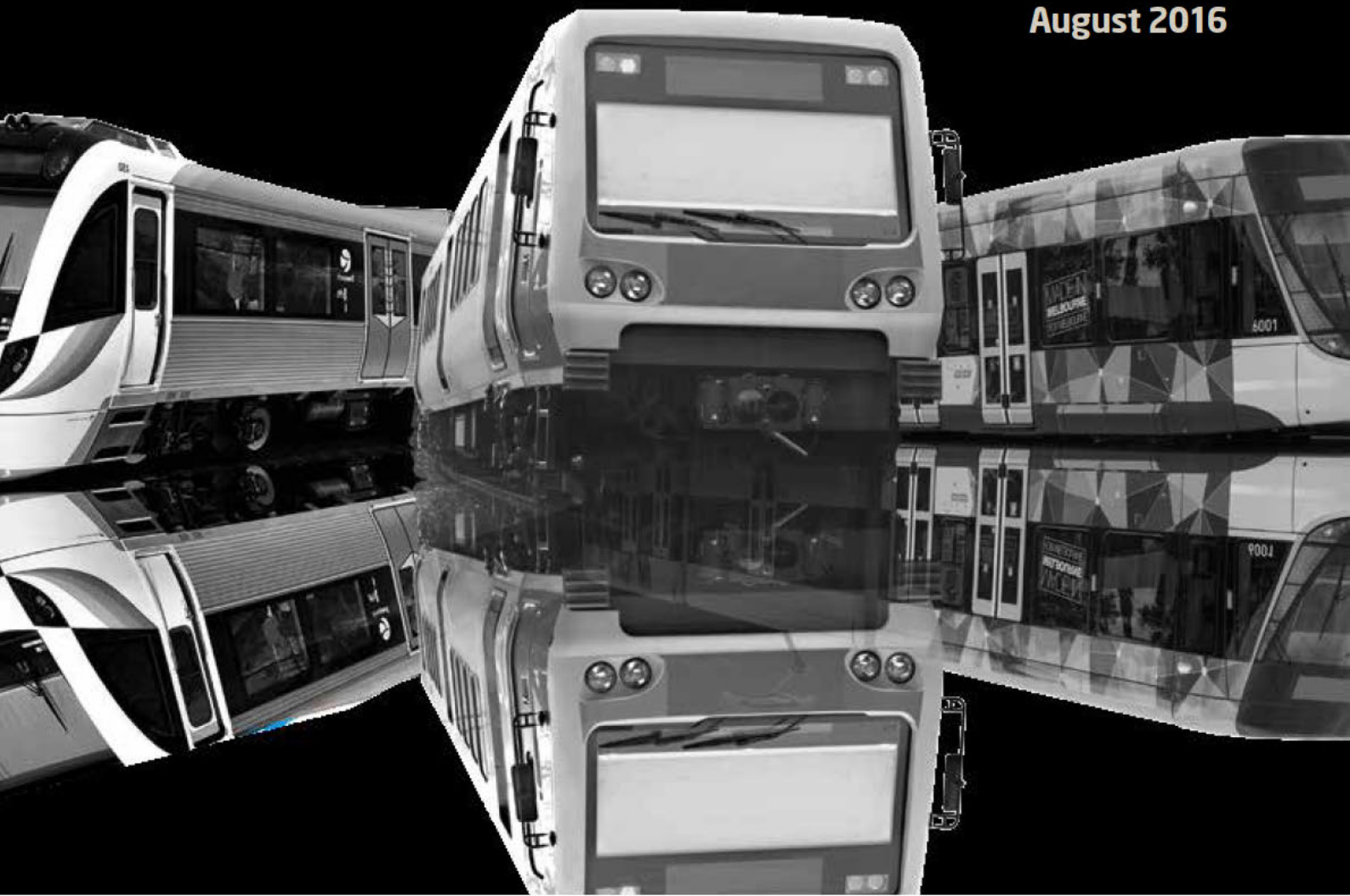
<sup>xvii</sup> Network Rail UK *Rail Utilisation Strategy: Passenger Rolling Stock* (2011) p. 3

<sup>xviii</sup> See Commonwealth Parliamentary Research Service *Rail and Urban Public Transport: Commonwealth Funding and Policy Issues* Research Paper No 12 (1994)



# REFORMS TO SAVE OUR PUBLIC TRANSPORT RAIL MANUFACTURING SECTOR

August 2016



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## FOREWORD

**The Australian Manufacturing Workers' Union is proud to be Australia's rail building union. We support a rail manufacturing and maintenance industry employing almost 20,000 people and representing \$1.75 billion per year in national income. Thousands in the industry choose to be our members.**

Australia is experiencing renewed demand for public transport. Governments nationwide are planning to spend over \$46 billion on rail public transport projects within a decade, including billions on new rolling stock.

The AMWU wants to ensure that this sector can give our local manufacturers and their employees the maximum possible number of productive and sustainable jobs. 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.

National reform in this sector will yield great efficiencies and deliver a strong local manufacturing future. This report examines the challenges and outlines practical reform – it seeks to bring all political leaders together to work towards 'economies' of scale in rolling stock procurement, design and volume of orders for local manufacturers.

Economic modelling reveals adopting reforms would yield between 550 and almost 700 full-time Australian manufacturing jobs and add between \$4.2 and 5 billion to our economy over a decade. It could even establish a sizeable export industry for Australian-made rolling stock.

Securing a bright future need not cost money – just a sincere commitment to national microeconomic reform. This report provides that reform direction so that our governments can deliver jobs and prosperity for Australian manufacturing workers.



Paul Bastian  
National Secretary  
Australian Manufacturing Workers' Union

August 2016



## Executive summary

- Viewed from a national perspective, Australia's State-based public transport rail manufacturing sector is fragmented, inefficient and overdue for reform. Economic modelling of plausible reform gains suggests results over a decade of:
  - 547 to 659 more full-time manufacturing jobs (avg. annual employment)
  - Added GDP contribution of \$4.2 to \$5 billion
  - Between \$6.6 and \$8 billion in added gross output of the sector
  - In addition, the development of a rolling stock export industry worth between \$3.8 and \$4.6 billion warrants further analysis.
- These gains are only likely to arrive through a political resolve to pursue genuine microeconomic reform of the State-based public transport rail sectors. This involves taking a national view, rather than allowing substantially fragmented, less-than-fully-coordinated arrangements to endure.
- An effective national approach does not involve a Commonwealth takeover, but can be a collaborative effort between leaders of the Federation to bring a single point of national accountability and standardisation in decision making to the sector, so the sector can perform at an efficient scale to generate maximum 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 such outcomes.
- It is a key role of the Commonwealth to pursue standardisation in transport. There are productive national reform precedents to consider in the national reforms to rail freight in the 1990s. Public transport is different from national rail freight reform, but the principle of standardising fragmented and expensive State-based manufacturing sectors is relevant. Doing so would be of national significance.
- Taking a genuinely national approach to rail manufacturing also allows Australia a strong, large-scale platform from which to make effective strategic decisions about transport infrastructure projects and about questions of local labour content in the manufacturing sector, in the national interest.

## Recommendations

The AMWU seeks to promote high-quality, sustainable Australian manufacturing jobs in rail, more profitable, competitive and sustainable local industry participants and an industry which considers and acts on strategic local content in the national interest, linked to other manufacturing sectors. Based on this report, it endorses the following recommendations:

### **Recommendation 1: Gain a comprehensive sense of problem and opportunity**

*Commission a market-led inquiry on the real benefits of national reform*

The Prime Minister and Premiers should agree to complement the analysis offered in this AMWU report with local manufacturers' views: a market-led examination of costs to the local rolling stock manufacturing industry incurred by maintaining multiple State-based planning, design and procurement arrangements should be commissioned. This should encourage all local manufacturers, suppliers, organised labour and rail operators to develop case studies quantifying the costs and risks of the current system. The process should model the benefits of moving to a national approach with a single source of national standards and accountability for all of these matters. Transport agencies should provide assistance to this examination as required. The process should be chaired by

**an international authority in this field. The process should report directly to the Prime Minister and Premiers with its findings and reform recommendations.**

### **Recommendation 2: Implement a proven national rail reform structure**

*Begin planning a national public transport authority*

The Prime Minister and Premiers should examine the merits of establishing a national public transport authority where all States and Commonwealth are equity shareholders in a common structure that minimises the fragmentation of the sector and offers maximum opportunities for volume of orders, certainty and innovation for local manufacturers, suppliers and their employees. The national rail freight reforms are a useful template.

### **Recommendation 3: Use the reformed structure to drive better labour strategies**

*Consider strategic manufacturing content in the national interest*

A national structure must give active consideration to the long-term local manufacturing content requirements that might be in the national interest to retain in this sector.



## Context, focus and approach

In 2015, the AMWU resolved to develop a high-quality economic policy position on public transport rail manufacturing which would form the centrepiece of a national campaign to fight for reform and jobs in the sector, in line with AMWU efforts in the Defence industry. Respected figures in transport economic policy and modelling Juturna/Cadence Economics were engaged to develop economic modelling, policy analysis and reform proposals in this respect.

In March 2016, the Australian Senate's Rural and Regional Affairs and Transport Committee announced an inquiry into the rail industry. The following report is designed to clarify the real challenges, identify productive reform paths, quantify the benefits on offer from prosecuting these reforms and present recommendations for achieving this objective.

### Public transport rail construction and maintenance is the focus

The report has limited itself to public transport rail procurement, manufacturing and maintenance matters, rather than freight matters. This is because in terms of efficient reform opportunities, freight rail manufacturing and maintenance is inherently more advanced than public transport, given that freight on rail has already

been the subject of important national reforms, in particular under the Keating Government in the early 1990s, as part of the *One Nation* transport policy reforms<sup>i</sup>.

In contrast to Australia's national rail freight management and control arrangements, public transport rail arrangements remain highly fragmented. There are five Australian State governments 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). Each government has sovereignty over these operations. There is no particular requirement for commonality or standardisation in public transport rail procurement, manufacturing, maintenance, nor is there any nationwide view available of how rail building and maintenance choices should interface with major public transport infrastructure projects for best effect and least cost.

In these respects, the public transport aspects of rail are at risk to the inefficiencies brought about by lack of maximum volume in manufacturing disparate fleets, lack of alignment in State design, strategy and procurement and lack of homogeneity 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.

## IN BRIEF

### What was the 'One Nation' transport policy?

The 'One Nation' transport policy was introduced by the Keating Government and ran between 1991 and 1996. In its totality it was a broad-based reform package for reform<sup>ii</sup>, but it had distinct transport aspects of relevance to the current public transport rolling stock manufacturing inefficiencies: The 'One Nation' rail policy was developed in part as an economic stimulus package aimed at spending on rail freight infrastructure, but the higher policy objectives dealt with the Commonwealth playing a standardising role in the Federation in regard to transport matters. 'One Nation' saw many standard gauge national rail freight additions which linked ports and cities which had until this point been stranded from national rail freight. Most notable of these additions was the construction of a standard gauge rail link between Melbourne and Adelaide.

In addition, 'One Nation' oversaw the implementation of a national rail freight corporation, in which the Prime Minister and several Premiers were equity shareholders, which took over disparate State-based interstate rail freight operations and provided for more efficient national freight outcomes. While the infrastructure projects undertaken by 'One Nation' were important, the more significant legacy of this policy is as a leading example of the Commonwealth and States working in partnership to attain national productivity goals in transport efficiency<sup>iii</sup>.





## Approach

This report includes a thorough literature review, including comparator reforms and metrics from overseas, where deemed relevant. Interviews were also conducted with senior managers at three Australian public transport rolling stock manufacturers.

In order to provide credible and internally consistent analysis of economic gains from reforming public transport rail manufacturing and maintenance, dynamic economic modelling of the sector was conducted. This work involved the construction of a dynamic computable general equilibrium model of the national public transport rail construction and maintenance sector and the wider national economy. Shocks have been passed through the model to simulate the impacts of plausible levels of productivity gains in the sector based on detailed industry consultation. This modelling approach does not appear to have been applied to the sector before. It offers a credible and internally-consistent basis for considering how practical and targeted reforms to the sector can yield more local jobs, a more stable and productive local industry and even a growing export industry, alongside very substantial economic gains.

The *Modelling methodology*, results chapter (page 15) details likely productivity gains and key input assumptions, while an appendix details the methodological approach to the modelling. The model itself is available for scrutiny as required at the discretion of the AMWU.

## Offering structural reform solutions, not just identifying the problem

As detailed below, credible labour and economic gains on offer from a more productive industry are impressive, but they will not be achieved without a commitment to decisive reform: as it stands, much of the inefficiency in the sector can be attributed to the fragmentation and sub-economic scale of the State public transport (PT) rail sectors, their lack of commonality and the additional costs and risks that this poses for a viable local manufacturing sector. The status quo has not overcome such inefficiencies to date, 115 years after Federation.

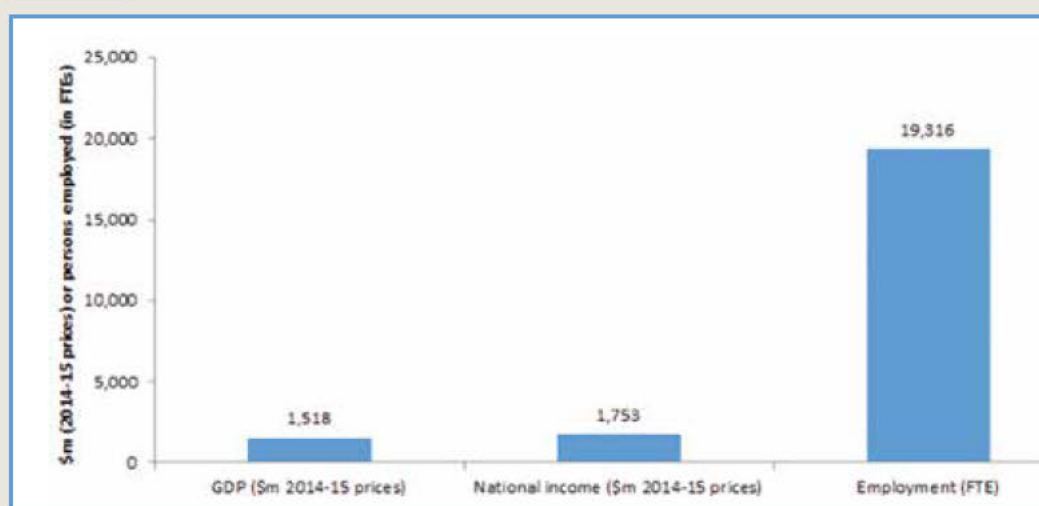
Accordingly, this report dedicates some time to considering the specific 'architectural arrangements' that stand the best chance of harvesting the modelled productivity gains. These views are provided with reference to examples in the UK and European Union, where standardisation efforts have resulted in a less-fragmented public transport rail network. These are also relevant to past national reforms in Australian rail freight, which dealt directly with issues of standardisation.

## The industry and its growth prospects

### The industry today

Rail manufacturing is a significant industry. The modelling for this submission undertook a shutdown scenario of the sector (see *Modelling methodology, results*, page 15) to gauge its realistic scale and economic contribution to the nation:

**TABLE 1. Contribution of the rolling stock industry to the Australian economy 2015-16**



### Demand for public sector rail stock is in a growth phase

In its 2013 report for the Australasian Rail Association<sup>iv</sup>, Deloitte found that State governments would purchase approximately \$30 billion of public transport rail rolling stock between them over the 30 years to 2043 – this would reflect rolling stock demand which would grow from around 4,000 cars nationwide in 2013 to almost 11,000 cars by 2043. This activity would be concentrated in metropolitan areas such as Auburn, Newport and Dandenong but also in regional centres such as Ballarat, Bendigo VIC, Newcastle NSW and Maryborough QLD.

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, measured *per capita* – continues to pursue more urbanisation. The growth in public transport recognises the economic reality that cities should be 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 kilometres in total area – accounted for almost 10% of all economic activity in Australia<sup>v</sup>: even minor gains in these fields can bring major benefits to the economy and quality of life.

When light rail projects are included, there has been over \$46 billion committed or planned for rail-based public transport



projects in Australia in just the next decade, including many billions for rolling stock:

**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 under Sydney Harbour and through the CBD for Stage 2 of Sydney Metro  Expected to open from 2024	\$6 billion
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 (NFI) Project Rolling Stock	Tender closed	\$2.8 billion (State Government funded)
QLD	Gold Coast Light Rail Stage 2	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	Forrestfield 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	The 2015-16 and 2016-17 State budget combined included a \$3.1 billion investment in new trains and 20 new E class trams for the network. Life extension of B Class trams in existing fleet. \$1.3 billion for 65 new high capacity metropolitan trains with a minimum 50% local content requirement. New maintenance depot to maintain the HCMT. \$257 million for 21 new VLocity regional carriages to be built at Dandenong. 27 additional New VLocity trains for regional services (on top of the 21 above). New regional maintenance depot Warrn Ponds Geelong. 10 new X Trapolis trains to be built in Ballarat. \$75 million to extend the life of more than 70 Comeng trains in the existing metropolitan fleet. Melbourne Metro Rail Project Enabling Works
VIC	Melbourne Metro Rail Project Enabling Works	Melbourne Metro is being assessed through an Environment Effects Statement (EES) process. The project was funded in the 2016-17 budget. Construction timeline 2018-2026.	Melbourne Metro Project was funded in the 2016-17 budget. Construction timeline 2018-2026. Estimated at \$10.9 billion. Implementation of a Victorian Rolling Stock procurement division within State Government.
VIC	Regional rail	Regional rail upgrades	\$1.3 billion for regional rail upgrades and infrastructure in 2016-17 budget

Source: Australasian Rail Association as at May 2016

## Will public transport demand be met efficiently or not?

The previous table of planned investments is impressive, but it is concerning that each of the State customers are administering considerably separate and distinct arrangements for procurement, planning design and manufacture of rolling stock across these projects.

Public transport policy is 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'*<sup>vi</sup>.

Part of the way that governments can manage their major city transport more efficiently is by drawing upon a larger-scale, more homogenous and thereby more efficient national rail manufacturing industry, rather than the current fragmented State-based sectors. This permits a much more efficient common approach to rolling stock design, procurement and manufacturing. In turn, it promotes a far more competitive and sustainable local rail manufacturing sector.

## Where do inefficiencies occur?

The following three broad categories of inefficiency are proposed:

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 are not required to coordinate or benchmark their procurement efforts. This affects many aspects of industry and procurement efficiency: potential clashes in timing of tendering obligations, complexities in design and build, volume of orders and how this might impact on a longer-term, national pipeline for wagon builds, the ability to maintain a standing workforce and tooling lines. Naturally, all of these inefficiencies affect value for money to consumers who are ultimately taxpayers.

The initial demand analysis and business case development for new rolling stock procurements is always 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<sup>vii</sup>. Another UK rolling stock report from the same year found that around 5% 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<sup>viii</sup>. The Deloitte-ARA report in 2013 found that 50% of total project costs are committed by the time governments complete the approvals,

tendering and design phase.<sup>ix</sup>

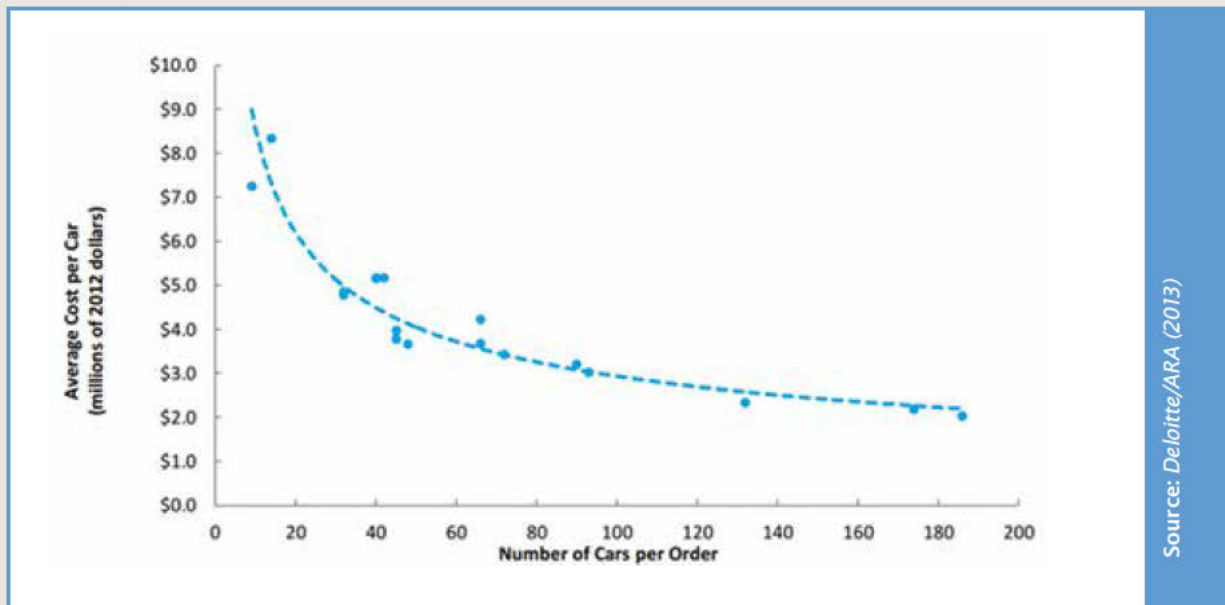
In 2014, Australia's Productivity Commission was clear that the early decisions of governments on planning, design and procurement require attention:

*'building a credible and efficient government and institutional framework for project selection is a critical and urgent task for governments'*<sup>x</sup>

When viewed from a national perspective, the design phase of rolling stock projects involves a very considerable degree of fragmentation in procurement choices. The Deloitte-ARA report in late 2013 identified 36 different types of 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<sup>xi</sup>. 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 (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%, from \$4 million each to just \$2.4 million:

**TABLE 3. Impact of order size on the average cost per car (single-deck train example)**



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

This approach also impacts adversely 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.

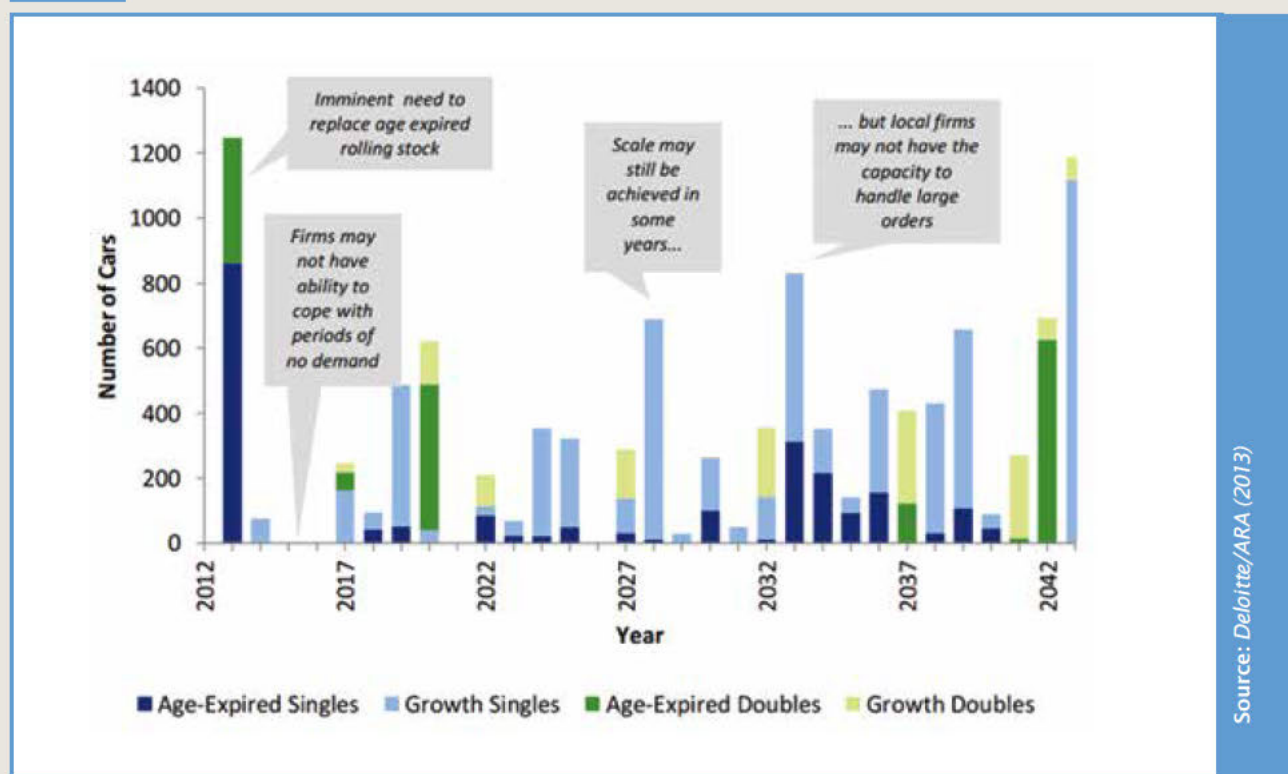
Interviews with some Australian producers raised the point that participating in each State tender for wagon building was a considerable cost. One manufacturer ventured at interview that a typical tender effort could cost between \$3 to 9 million. At times, there are clashes in tender timing between States, meaning in the short-run, some local manufacturers might be 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 place further pressure on manufacturers' capacity to retain standing workforces during slow periods.



## 2. Turbulent, unpredictable demand for orders

Interviews conducted 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 already be lost to a full import model:

**TABLE 4.** Rolling stock orders under the business as usual case



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 even around 150 cars of single design could be achieved<sup>xii</sup>.

A more stable, efficient and predictable manufacturing pipeline allows local manufacturers 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 who can often 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'.*

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<sup>xiii</sup> 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 in the mid-1990s and has a single national track owner with a common track gauge - the information challenge facing the far more fragmented Australian public transport rail states is even greater. 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<sup>xiv</sup>. Taig found that the 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 harmonization'.*

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 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'.*

### Standardised efficiencies and centres of excellence elsewhere

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% reduction in manufacturing costs<sup>xv</sup>. 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 lacks the necessary authority to act in this space and influence authoritative change across the States. That there have been no demonstrable changes in this respect since the Taig report was presented to transport ministers in 2013 suggests a *'status quo'* culture which may have little appetite for optimised national reform.



## Benefits of reforming a fragmented economic sector

What level of productivity gains are plausible to expect in the context of a fragmented Australian public transport rail manufacturing sector? Modelling 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"> <li>Optimising trains per order</li> <li>Harmonised and smoothed production levels</li> <li>Reduced heterogeneity</li> <li>More market involvement in design standards</li> <li>Smoothed funding for major procurements</li> </ul>	<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 do 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 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 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'.
UK train manufacturers via 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 via 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	
Juturna-Cadence assessment for AMWU: average order of realisable gains	25% cost saving rising to a high case of 30%		Based on examination of upside opportunities on offer through effective architectural reforms to a standardised national arrangement and informed by international comparators and industry feedback

Source: Australasian Rail Association as at May 2016



## Estimating the scale of credible productivity gains for modelling purposes

A figure slightly higher than the Deloitte 19% was employed for modelling realistic standardisation productivity gains in the Australian passenger rail market through a dynamic economic model. A high case of 30% was modelled for sensitivity purposes. A 25% figure is recommended as a base case.

## Chosen gains for modelling purposes - in context

The Deloitte report arrived at a 19% gain but this report did not appear to place substantial emphasis on what some in the industry warrant are significantly high-cost and uncertain tendering processes under the current State-based system. The Deloitte assessment of 19% also presumes 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<sup>xvi</sup>. While this is perhaps 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 updates have appeared on progress and Taig made the point in 2012 - three years after this national agreement - that there was almost no data available on the amount of spending on PT by State, let alone agreed standards and benchmarks. The lack of serious ministerial action in response to Taig's report was perhaps itself telling.

In light of these facts, the harmonisation approach can be considered to have 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% Australian market gains proposed in the Deloitte report. Yet if the important structural deficiencies are tackled 'head-on' the gains appear large.

The baseline 25% also appears reasonable to this report in the light of an important UK comparator: analysis by ARUP in 2011 advised gains of 17 to 28% were on offer to the UK's rail manufacturing sector. It should be appreciated that such 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 yet available in Australia:

- UK above-rail services have access to coach-leasing firms 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% productivity gain appeared fully plausible here. 25% gains were regarded as 'comfortably achievable' by at least one national manufacturing CEO at interview. One productive basis for modelling mature gains is to assume a move to fully standardise PT rail procurement, manufacturing and maintenance through a national model of single 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 aspects of the UK and French national models.

## A note on public transport and freight manufacturing ratio assumptions

One important factor for further examination is a definitive position on the percentage of the rail manufacturing sector involving public transport as opposed to freight vehicles. The ratio chosen in this respect will have a considerable influence on the overall modelling outcomes. Industry feedback was sought on what a reliable ratio to employ might be, given the current profile of the sector overall. A ratio of 65% public transport builds to 35% freight was employed as a plausible post-mining boom ratio. This would benefit from further formal analysis.

## Modelling methodology, results

**The estimates are based on the Cadence Economics General Equilibrium Model (CEGEM). The model has significant flexibility in its sectoral and regional specification, which is important in the context of this analysis. Appendix 1 (page 18) provides more detail on this model.**

### The scenarios considered

The scenarios undertaken in the analysis fall under three categories.

The first category is the baseline, or reference case scenario, that begins with a base year of 2014/15 and covers a forecast period to 2024/25. Under this scenario, economic growth and labour market assumptions are imposed on the model to determine aggregate economic growth. Significantly, there is an assumption that investment in passenger rail manufacturing is \$44 billion over the forecast period, spread equally across years. Other forms of railway rolling stock manufacturing, freight and mining, grow in line with aggregate economic growth.

The second category of scenario is the assumed shutdown of all railway rolling stock manufacturing in Australia. Under this scenario, all production of Australian railway rolling stock is replaced by imported sources in 2015/16.

This scenario is designed to give a point estimate of the contribution of the railway rolling stock manufacturing industry to the Australian economy. Under this scenario, real wages are held fixed and capital is not allowed to adjust out of the sector. In this context, the scenario is closely aligned to input-output modelling, and can be considered an upper bound estimate of the economic impact of shutting down the sector. The results of this analysis are summarised at Table 1 (page 7).

The final category of scenarios relates to assumed improvements in the efficiency of the Australian passenger transport rolling stock manufacturing sector.

Two scenarios are considered, one assuming a 25% increase in the efficiency of using all inputs into production (primary factors and intermediate inputs), the other assuming a 30% increase in productivity. These scenarios are undertaken under standard CGE modelling assumptions where real wages are free to adjust to changes in labour demand and capital is able to reallocate across sectors.

### Improving productivity

Improving the productivity of Australia's passenger rolling stock manufacturing sector would result in a significant gain in manufacturing jobs as well as an increased output and economic contribution.

This is because a 25% productivity improvement in the sector implies considerably less resources are required in the production process, reducing prices and freeing up resources to be used elsewhere in the economy. As a result, Australia's GDP is projected to increase by around \$4.2 billion over a 10 year period (measured in real 2014-15 prices using a 7% real discount rate) and there is a commensurate increase in national income.

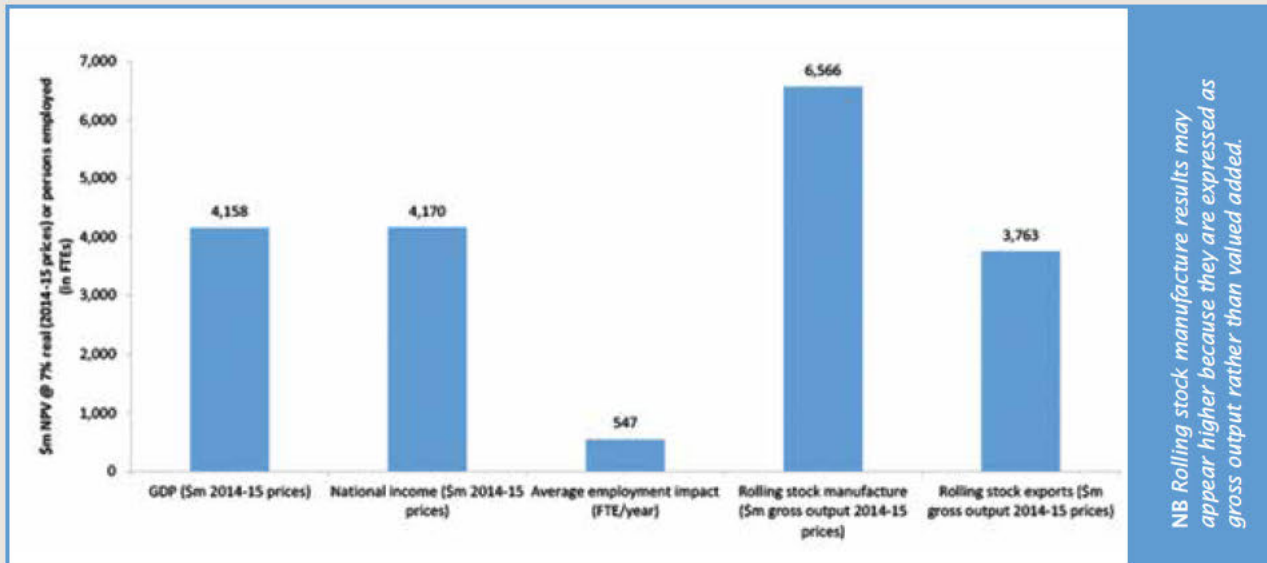
A 25% increase in productivity also results in higher levels of full-time employment across the Australian economy by an average of 547 persons over the 10-year period. Around half of this increase in employment is in the passenger transport rolling stock manufacturing sector. The other half of the increase in employment is in supplying sectors such as steel production.

This increase in GDP and aggregate production results in higher national income and employment over the same period. In the model results we can also observe that obtaining these efficiencies in the sector allows it to build a competitive international exports sector worth several hundreds of millions of dollars annually due to improved price competitiveness of Australian railway rolling stock on international markets.



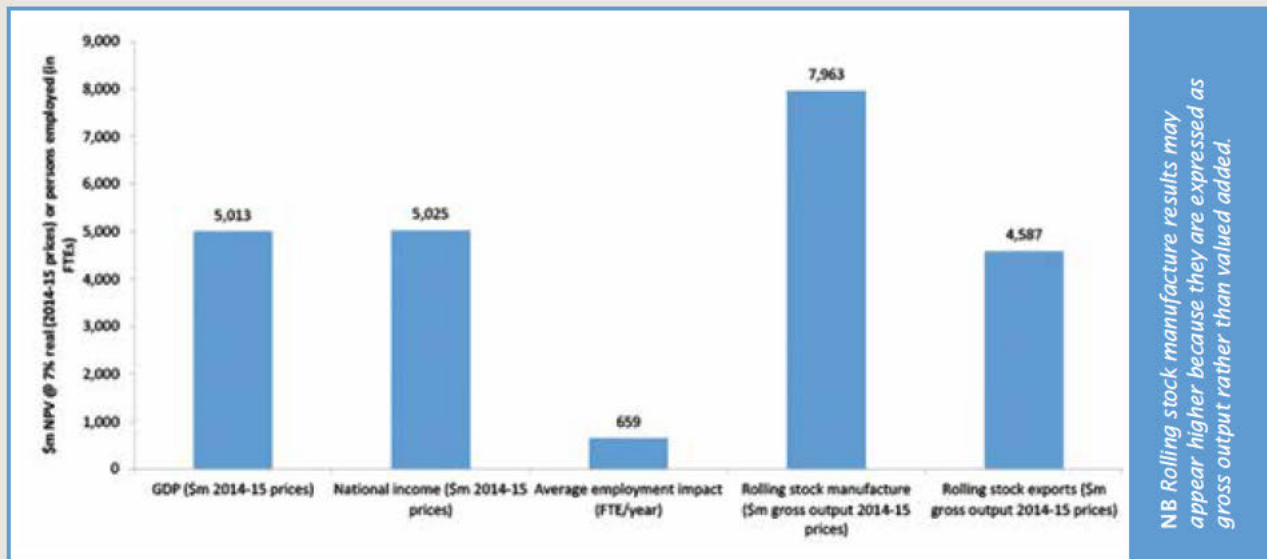


**TABLE 6.** Impact over 10-years of a 25% productivity gain in PT rolling stock manufacturing sector



The model results show that the benefits to the Australian economy are directly linked to the extent of the productivity improvements realised as a result of reform. Under a plausible upper-band 30% gain, the impacts on GDP, national income, employment and exports are significantly higher than under the 25% productivity scenario (see figure below).

**TABLE 7.** Impact over 10-years of a 30% productivity gain in PT rolling stock manufacturing sector



## The emergence of a rolling stock export industry

The modelling also suggests the development of a substantial rolling stock export industry worth several hundred million dollars annually. This aspect of the modelling is encouraging, but warrants further analysis. The results for the passenger rolling stock industry are highly sensitive to parameters contained in the model. If the industry is assumed to have export potential, the standard parameter settings in the model imply large export responses given the assumed productivity gains. Further simulation and analysis is warranted around this aspect of the productivity gains.

## Recommendations to secure the industry's jobs future

In 2011, leaders of the UK rail sector acknowledged similar rolling stock challenges:

*'Extreme complexity...is no reason for inaction, inertia or quiescence... The need safely to drive inefficient cost out of the industry is paramount. Over the next two generations of rolling stock, potentially hundreds of millions of pounds could be saved'.<sup>xvii</sup>*

### Logic test: would the UK sector adopt the current 'Australian' model as a solution?

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 sovereign public transport entities, which would largely pursue their own rolling stock plans, designs and procurement programs to their own timeframes, without recourse to a common set of standards and objectives, with no requirement to publish their results or measure their efforts against one another? The proposition is ludicrous. This underlines the urgency of doing better in the Australian context and not accepting vague undertakings as an acceptable reform solution.

#### Recommendation 1: Gain a comprehensive sense of problem and opportunity

*Commission a market-led inquiry on the real benefits of reform*

**The Prime Minister and Premiers should agree to complement the analysis offered in this AMWU report with local manufacturers' views: a market-led examination of costs to the local rolling stock manufacturing industry incurred by maintaining multiple State-based planning, design and procurement arrangements should be commissioned. This should encourage all local manufacturers, suppliers, organised labour and rail operators to develop case studies quantifying the costs and risks of the current system. The process should model the benefits of moving to a national approach with a single source of national standards and accountability for all of these matters. Transport agencies should provide assistance to this examination as required. The process should be chaired by an international authority in this field. The process should report directly to the Prime Minister and Premiers with its findings and reform recommendations.**

### A national approach is required, with standardisation as its objective

How productive change might best be achieved is informed by the Australian Constitution itself, where the Commonwealth has a head of 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 national reforms to the interstate rail freight industry by the Hawke and Keating Governments in the late 1980s and early 1990s should be considered.

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<sup>xviii</sup>. 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. Such an approach in public transport might be expected to meet some opposition. However, those in a position to influence such reforms should 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. 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.

There certainly does not appear to be any practical case for removing the role of State public transport agencies overall, or for moving their responsibilities to the Commonwealth. Neither approach would be productive or practical, but a nationwide standard approach to procurement and manufacturing is desirable; it appears achievable by following aspects of the Hawke-Keating national reforms in freight.

## **Recommendation 2: Implement a proven national reform structure**

*Begin planning a national public transport authority*

**The Prime Minister and Premiers should examine the merits of establishing a national public transport authority where all States and Commonwealth are equity shareholders in a common structure that minimises the fragmentation of the sector and offers maximum opportunities for volume of orders, certainty and innovation for local manufacturers, suppliers and their employees. The national rail freight reforms are a useful template.**

## **Wider benefits of national reform in PT rail manufacturing**

### **1. Whole–industry, whole–life cost approach links rolling stock to fixed asset projects**

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. Strategic position from which to make decisions about local manufacturing content**

The lack of a 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, 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. Among other benefits, this could provide increased demand for strategically important but currently struggling Australian steel and other metals producers. Many of the core manufacturing skill sets are common across all of these sectors. Moving to a more national approach for public transport rail manufacturing would allow future governments to examine local manufacturing labour content in a far more strategic way, in the national interest.

## **Recommendation 3: Use the reformed structure to drive better labour strategies**

*Consider strategic manufacturing content in the national interest*

**A national structure must give active consideration to the long–term local manufacturing content requirements that might be in the national interest to retain in this sector.**

## **Report authors**

This report was authored by Messrs. Luke Fraser, John Zeitsch, Steve Brown and Bob Scealy, Juturna – Cadence  
[www.juturna.com.au](http://www.juturna.com.au)  
[www.cadenceeconomics.com.au](http://www.cadenceeconomics.com.au)

### **Disclaimer**

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### **AMWU POINTS OF CONTACT:**

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

## **Appendix 1:**

### **Overview of the CEGEM economic model**

CEGEM is a multi-commodity, multi-region, dynamic model of the world economy. Like all economic models, CEGEM is based on a range of assumptions, parameters and data that constitute an approximation to the working structure of an economy. Its construction has drawn on the key features of other economic models including models such as GTAP and GTEM, with state and regional modelling frameworks such as Monash-MMRF and TERM.

CEGEM is a recursive dynamic model that solves year-on-year over a specified timeframe. The model is then used to project the relationship between variables under different scenarios, or states, over a predefined period.

Labour, capital, land and a natural resource comprise the four factors of production. On a year-by-year basis, capital and labour are mobile between sectors, while land is mobile across agricultural sectors. A natural resource endowment is specific to mining and is not mobile. A representative household in each region owns all factors of production. This representative household receives all factor payments, tax revenue and interregional transfers. The household also determines the allocation of income between household consumption, government consumption and savings.

Capital in each region of the model accumulates by investment less depreciation in each period. Capital is mobile internationally in CEGEM where global investment equals global savings. Global savings are made available to invest across regions.

The model assumes labour markets operate to adjust employment and wages in each year so that, for example, in the case of an increase in the demand for labour, the real wage rate increases in proportion to the increase in employment from its base case forecast level.



CEGEM determines regional supplies and demands of commodities through optimising behaviour of agents in perfectly competitive markets using constant returns to scale technologies. Under these assumptions, prices are set to cover costs and firms earn zero pure profits, with all returns paid to primary factors.

The advantage of a global model such as CEGEM is that it accounts for bilateral trade flows of all commodities between regions. Goods are imperfect substitutes, implemented through the Armington assumption. The model does not require the regional current account to be in balance as the capital account can adjust to maintain balance of payments equilibrium.

#### Base data

The starting point for the base data in CEGEM is the global database produced by the Global Trade Analysis Project (GTAP). This database is comprised of 140 country and regional groups and 57 production sectors. The Australian component of this database was supplied by the Productivity Commission, and is based on Australian input-output tables produced by the Australian Bureau of Statistics (ABS).

For the purpose of this exercise, the database has been aggregated to the 13 sectors shown in Table 8. Of significance, Railway rolling stock manufacturing has been separated from manufacturing in the database. This sector includes passenger transport manufacturing, along with freight and mining. The database also has State-level detail along with a Rest of the World region.

**TABLE 8. Sectors and regions in CEGEM**

Number	Sector	Number	Region
1	Agriculture	1	New South Wales
2	Coal	2	Victoria
3	Oil	3	Queensland
4	Gas	4	South Australia
5	Other Mining	5	Western Australia
6	Railway rolling stock manufacturing	6	Tasmania
7	Manufacturing	7	Northern Territory
8	Electricity	8	Rest of the World
9	Water		
10	Construction		
11	Trade		
12	Transport		
13	Other Services		

- i See Commonwealth Parliamentary Library Commonwealth involvement in reform of the rail freight industry Research Paper No 19 (2008–09)
- ii The full 1992 One Nation policy statement can be found online at: <http://www.voced.edu.au/content/ngv%3A675> site accessed 20 May 2016
- iii See Commonwealth Parliamentary Research Service Rail and Urban Public Transport: Commonwealth Funding and Policy Issues Research Paper No 12 (1994)
- iv Deloitte for Australasian Rail Association Opportunities for Greater Passenger Rolling Stock Procurement Efficiency (2013)
- v Jane–Frances Kelly and Paul Donegan Mapping Australia's Economy: cities as engines of prosperity Grattan Institute (2014)
- vi 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)
- 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)



## **AMWU Supplementary Submission**

This submission, made at the request of the Chair and other Committee members will respond to the questions taken on notice and reflect broadly on the issues raised during the evidence of the AMWU to the Committee.

Given the focus on our international obligations in questioning by the Chair, this submission will begin with a discussion of the AMWU's view on how they interact with the AMWU's goal of achieving 100% local procurement. We will then discuss the implication that it has for specific changes to the CPRs. The submission will finish with the responses to a few stand alone questions asked by the Chair and other members of the committee.

### International Obligations

The AMWU believes that the government can achieve 100% local content from procurement in the medium term, while adhering to its current trade agreements.

To demonstrate our points, the following discussion will focus on the US Free Trade Agreement (USFTA) as it was raised specifically at the hearing.

### Exemptions

Before we look at what Chapter 15 (Government Procurement) of the AUSFTA applies to, it is important to be specific about what is excluded from its operation.

It does not apply to any scheme the government may have to preference small and medium enterprises:

#### **Section 7: General Notes**

Unless otherwise specified herein, the following General Notes in each Party's Schedule apply without exception to this Chapter, including to all sections of this Annex.

Schedule of Australia

This Chapter does not apply to:

**(a) any form of preference to benefit small and medium enterprises;**

(b) measures to protect national treasures of artistic, historic, or archaeological value;

(c) measures for the health and welfare of indigenous people; and

(d) measures for the economic and social advancement of indigenous people.



This exemption provides the government with the ability to develop a program that explicitly limits tenderers in some instances to Australian SMEs. This can and should be used to develop existing businesses and to encourage new businesses to grow and deliver goods and services that government needs.

There should be a focus on goods and services which the government currently acquires off-shore. This will assist the government to reach a medium term goal of 100% local procurement, while remaining in line with our international obligations.

There are also exemptions for defence procurement and “essential supplies.”

### **3. Coverage**

The Chapter applies only to procurements by entities listed in the annexes with a value equal to or above certain thresholds. Annex 15-A lists 79 US Federal Departments including the new Department of Homeland Security. Subsidiary agencies of the US listed entities are covered unless specifically excluded.

Australia's list in Annex 15-A includes all Federal Departments and all other agencies covered by the Financial Management and Accountability Act 1997. In addition, Australia has listed in Annex 15-B, 33 entities covered by the Commonwealth Authorities and Companies Act 1997.

**The US and Australian Departments of Defence are listed in Annex 15-A. Both sides have exempted procurement of items that are critical to their national security such as military equipment, systems and essential supplies.** Australia has also reserved the right to maintain the Australian Industry Involvement Program for defence procurement.

The Australian government should ensure that it has properly assessed which goods and services should be considered essential supplies. The AMWU believes that the government has taken too narrow a view on the types of industries which should be considered essential in our national interest. A full review should be undertaken to ensure that this exemption is being fully and appropriately utilised.

### AUSFTA – Government Procurement

Clause 15 of the AUSFTA relates to government procurement. The section which causes the most concern for Australian procurement officials is clause 15.2 which states that:

#### **National Treatment and Non-Discrimination**

1. Each Party and its procuring entities shall accord unconditionally to the goods and services of the other Party and to the suppliers of the other Party offering the goods or services of that Party, **treatment no less favourable**

**than the most favourable treatment the Party or the procuring entity accords to domestic goods, services and suppliers.**

2. A procuring entity of a Party may not:

(a) treat a locally established supplier less favourably than other locally established suppliers on the basis of degree of foreign affiliation or ownership; nor

(b) discriminate against a locally established supplier on the basis that the goods or services offered by that supplier for a particular procurement are goods or services of the other Party.

This sets out that the government must treat companies from the US no less favorably than any Australian company. This section must be read in conjunction with the rest of Chapter 15 to understand the other discretion that government's can use when making decisions on procurement under the AUSFTA.

Section 15.9 sets out how contracts are to be awarded:

5. A procuring entity may not consider a tender for award unless, at the time of opening, the tender conforms to the essential requirements of all notices issued during the course of a covered procurement or tender documentation.

6. Unless a procuring entity determines that it is not in the public interest to award a contract, **it shall award a contract to the supplier** that the entity has determined satisfies the conditions for participation and is fully capable of undertaking the contract and **whose tender is determined to be the lowest price, the best value, or the most advantageous, in accordance with the essential requirements and evaluation criteria** specified in the notices and tender documentation.

7. A procuring entity may not cancel a covered procurement, nor terminate or modify awarded contracts so as to circumvent the requirements of this Chapter.

This gives the Australian government significant leeway in the way that it sets out its evaluation criteria and how it defines the concept of "best value."

#### Defining Best Value for government procurement

The AMWU believes that the current CPRs do not take advantage of the ability of the government to explicitly define best value to include the other benefits that flow from government procurement decisions.

A proper understanding of the value to the Australian economy of purchasing goods produced and services delivered locally, against those procured from off-shore, would allow the government to transparently and openly provide weightings to locally produced goods and services.

The economic benefits that flow directly to government through higher taxes and lower welfare spending, and indirectly through higher skills, improved labour and capital productivity and the spill over effects for the wider economy, should form part of any government decision on which proposal provides “best value.”

For example, a contract for the provision of office paper to the Australian government could include a weighting of 15% on material costs for any bidder who will provide paper made in Australia and 10% for service costs, where the staff providing those services were located in Australia.

In this scenario, all bidders will be treated equally. Australian firms are welcome to bid with imported paper and off-shore service support, and any American firm is welcome to bid with domestically-sourced paper and to open an Australian service support centre. All bidders know the evaluation criteria in advance and all parties understand what the Australian government believes will deliver best value when it does its calculations and the reasons for those decisions.

The weightings could be fixed for lower value tenders (to make things easy), but additional weight could be added for larger projects, given the value of establishing or maintaining local industries, developing skills and ensuring sovereign capabilities to deliver vital goods and services.

#### Justification for overseas procured items

To further improve the culture around the selection of tenders, procurement officials should be required to provide a reviewable justification when they select goods or services procured from off-shore over those provided locally. This should be provided to the Industry Participation Advocate (discussed in more detail later) before contracts are awarded to ensure that the Australian tender(s) has been properly assessed. There may be very limited occasions when this is the best value outcome from a tendering process, but it should not be the “easy option” for officials to select.

This process will also allow government to highlight those areas where the local industry is unable to provide goods or services that government needs. This should be passed on to an Industry Participation Advocate to allow them to identify Australian businesses that may be able to diversify into this area. It would also allow future tenders to be quarantined for Australian SMEs to help grow a local capacity.

This holistic approach to government procurement will allow government to achieve 100% local content over the medium term, while adhering to our

international obligations. It will reward investment in jobs and skills in Australia by recognising and appropriately weighting the contribution that government spending makes to the Australian economy.

#### Changes to existing guidelines

The AMWU notes that the ACTU and CFMEU/TCFUA have made submissions that propose detailed changes to a number of clauses in the current CPRs and the AMWU endorses those submissions. In light of those submissions, we make the following suggestions for consideration by the Committee.

The AMWU believes that the CPRs would be improved by setting out specifically what purchasing officials must do in order to deliver an outcome which provides best value to the Australian government, economy and community. They should provide support for purchasing officials to assist them to make simple decisions that take into account the full benefits of purchasing locally made goods and locally delivered services.

The current overarching principles set out in clause 10.30 are too vague and do not provide enough assistance to officials to make the often difficult calculations about which tender provides best value.

This difficulty is compounded by clause 10.31 which serves no useful purpose. It does not inform purchasing officials about what specific requirements are placed on their decision making by the “relevant national and international agreements” to which it refers. This clause seems to have been included for the sole purpose of undermining clause 10.30.

The argument made in our original submission is that our international obligations are poorly understood. We argued that they are generally considered by purchasing officers to be much more restrictive on our ability to preference locally made goods and locally delivered services than is actually the case. By reminding officials of these requirements, without setting out detailed instructions on how the government expects them to be implemented, clause 10.31 simply reinforces the existing bias towards purchasing the lowest cost goods and services.

The AMWU recommends that clause 10.31 be deleted and replaced with additional information in published guidelines that sets out how best value is to be understood and calculated by purchasing officials in line with our treaty obligations.

The AMWU recommends that clause 10.30 be amended as follows:

10.30 In addition to the considerations at paragraph 4.4, in order to ensure that the Australian government is getting best value for *procurements* under \$1 million Commonwealth *officials* are required to provide the appropriate weighting for work undertaken in Australia set out in table X. For *procurements* over \$1 million, to ensure that the Australian government is getting best value, a separate investigation must be undertaken to evaluate if

any additional weighting should be added for work undertaken in Australia due to the economic benefit of the *procurement* to the Australian economy, industry or skill development.

#### Existing government procurement models

The AMWU believes that the Committee could learn from the approach to procurement taken by the South Australian and Victorian governments. There is an extensive review of the success of the Victorian model in the ACTU submission and the AMWU commends it to the committee.

Furthermore, the AMWU supports any efforts to assist Australian businesses to participate in major projects and to tender for government procurement projects. The current system can be confusing to new entrants and many Australian manufacturing firms have untapped skills, equipment and expertise that could be better utilised if it was connected with international and government customers. South Australia's Industry Participation Advocate is a model that should be investigated by the Commonwealth.

#### Australian Industry Participation Plans

The objective of the Australian Industry Participation Plans (AIPs) are to require proponents to:

- 1) demonstrate how full, fair and reasonable opportunity will be provided to Australian businesses to supply goods and services to a project; and
- 2) detail the supply of key goods or services for a facility's initial operational phase, if the project involves establishing a new facility.

The AMWU believes that requiring proponents of major projects to undertake these tasks will help to increase the number of Australian businesses and workers engaged on these projects.

As such, the AMWU has submitted that the definition of Major Project under the Australian Jobs Act 2013 be reduced from \$500 million to \$50 million. This will ensure that a greater number of proponents will need to demonstrate how Australian businesses have been given a full, fair and reasonable opportunity to supply goods and services on their project.

By requiring a greater number of companies to show that they are giving Australian businesses and workers a fair go, AIPs may help to drive a cultural change in the private sector. Anything the government can do, especially something with a little cost as AIPs, to drive a "local first" culture when it comes to purchasing goods and services by the private sector will lead to more jobs in Australia.

In relation to the requirement that companies bidding for Australian government tenders valued at over \$20 million complete an AIP, the AMWU recommends that this be reduced to \$10m.

Furthermore, the requirement to engage local suppliers of goods and services for all government tenders should be required as part of all standard tendering practice, rather than just those subject to an AIP. A change of this nature would help to drive the change in culture that the AMWU believes is necessary as outlined in our previous submission.

Appendix 3 of the CFMEU/TCFUA submission includes a lengthy analysis of AIPs and the AMWU commends it to the committee.

### Australian Standards

The current CPRs and guidelines leave it to the procurement official to determine whether an Australian Standard applies and the nature of the evidence that must be supplied by the tenderers of their ability to meet that standard.

This falls well short of the systematic and mandatory application of Australian Standards to all government procurement which the Australian community expects. If an Australian Standard exists, it should apply.

It is not reasonable for the government to place a complex requirement in the hands of procurement officials without the necessary support. Especially in the context of the guidelines allowing clause 10.10 to be applied at the discretion of the procurement official, this is unlikely to make any impact on existing procurement practices.

The government should require tenderers to name all relevant standards that apply and declare that they are compliant with them. This should be monitored by an independent authority with the relevant skills to certify those claims. It is also important to ensure that management strategies are developed for high risk procurements to ensure that this new requirement achieves the changes that are required.

Paul ~~Bastian~~

National Secretary  
AMWU