Standing Committee on State Development

Defence industry in New South Wales

Ordered to be printed 7 June 2018

New South Wales Parliamentary Library cataloguing-in-publication data:

New South Wales. Parliament. Legislative Council. Standing Committee on State Development.

Defence industry in New South Wales / Standing Committee on State Development. [Sydney, N.S.W.] : the Committee, 2018. – [xii, 120] pages; 30 cm. (Report no. 43 / Standing Committee on State Development)

Chair: Hon. Taylor Martin, MLC.

"June 2018"

ISBN 9781922258502

- 1. Defence industries—New South Wales.
- I. Martin, Taylor.
- II. Title.
- III. Series: New South Wales. Parliament. Legislative Council. Standing Committee on State Development. Report; no. 43

338.473552609944 (DDC22)

Table of contents

	Terms of reference	V
	Committee details	vi
	Chair's foreword	vii
	Recommendations	ix
	Conduct of inquiry	xi
Chapter 1	The Defence industry in New South Wales	1
	The Australian Government 2016 Defence White Paper and the Integrated Investment Program Australian industry involvement	1 1 2
	The NSW Government New South Wales: Strong, smart and connected	3
	Defence industry overview	6
	Defence presence in New South Wales	10
	Economic value of Defence investment in New South Wales	11
	New South Wales share of Defence investment Committee comment	14 15
Chapter 2	Leadership and resourcing	17
	The need for strong leadership and advocacy Calls for the establishment of oversight and advisory bodies Committee comment Resourcing Defence NSW Committee comment	17 19 21 22 23
Chapter 3	Supporting defence industry growth	27
	Prioritising projects which focus on the strengths of New South Wales The NSW Government position The value of sustainment and maintenance Opportunities provided by the Naval Shipbuilding Program Committee comment	27 27 29 29 31
	Increasing the accessibility of defence markets Defence procurement Centre for Defence Industry Capability Assisting SMEs identify defence market opportunities	32 32 33 34

	Supporting SMEs to become 'defence ready'	36
	Access to finance	36
	Committee comment	37
	Enhancing industry capability, visibility and involvement in Defendence	e projects
		38
	The Australian Government Defence Industrial Capability Plan	39
	Support for a New South Wales Defence Capability Directory	40
	Understanding the defence industry capabilities of New South Wales	41
	Access to effective telecommunication networks	43
	Committee comment	43
	Developing the future workforce	44
	Declining participation in STEM subjects	44
	The need to address the STEM shortfall	45
	Promoting STEM	46
	Access to training that meets industry needs	48
	Committee comment	50
	Exports	51
	Export figures	52
	Export challenges	52
	Committee comment	53
	Aerospace precinct opportunities	53
	Western Sydney Airport Aerospace Precinct	54
	Hunter Defence Aerospace Park	55
	Committee comment	56
	Supporting research and innovation	56
	Australian Government initiatives	56
	The Defence Innovation Network	57
	Collaboration between Defence, industry and academia	58
	Committee comment	59
	Supporting the space sector in New South Wales	59
	Untapped opportunity for New South Wales	60
	Committee comment	63
Appendix 1	Submissions	65
Appendix 2	Witnesses at hearings	67
Appendix 3	Minutes	72

Terms of reference

- 1. That the Standing Committee on State Development, with reference to the New South Wales: Strong, Smart and Connected Defence and Industry Strategy 2017, inquire into and report on opportunities to incentivise and grow the defence industry in New South Wales to generate economic development and in particular:
 - a. maximise opportunities for NSW-based companies from Defence's growing exports and investment in defence capability in both acquisition and sustainment
 - b. encourage defence industry innovation, research and education including developing the future workforce
 - c. identify targets, programs and projects for defence spending in New South Wales
 - d. maximise the economic benefits of locating defence force bases and defence industry in the regions
 - e. how to establish and sustain defence supportive communities
 - f. further enhance collaboration between the NSW Government and Commonwealth agencies
 - g. any other related matter.
- 2. That the committee report by 7 June 2018.

The terms of reference were referred to the committee by the Hon Niall Blair MLC, Minister for Minister for Primary Industries, Minister for Regional Water, Minister for Trade and Industry on 3 May 2017.¹

¹ Minutes, NSW Legislative Council, 9 May 2017, p 1575.

Committee details

mmittee members ²		
The Hon Taylor Martin MLC ³	Liberal Party	Chair
The Hon Mick Veitch MLC	Australian Labor Party	Deputy Chair
The Hon Rick Colless MLC	The Nationals	
The Hon John Graham MLC	Australian Labor Party	
The Hon Paul Green MLC	Christian Democratic Party	
The Hon Natasha Maclaren-Jones MLC	Liberal Party	

Contact details

Website www.parliament.nsw.gov.au/statedeve	
Email	state.development@parliament.nsw.gov.au
Telephone	(02) 9230 3543

The Hon Natalie Ward MLC replaced the Hon Greg Pearce MLC as a substantive member of the committee from 30 November 2017.

The Hon Taylor Martin MLC replaced the Hon Greg Pearce MLC as Chair of the committee from 13 February 2018. The Hon Taylor Martin MLC replaced the Hon Natalie Ward MLC as a substantive member of the committee on 13 February 2018.

Chair's foreword

The defence industry presents a considerable opportunity to New South Wales as a key contributor to employment, economic growth and innovation. The inquiry was established to inquire into and report on how New South Wales could take advantage of opportunities available to position and grow the defence industry in New South Wales in order to further generate economic activity. The Australian Government has committed \$195 billion to expanding Australia's defence capability over the next decade and New South Wales is well positioned to benefit from this investment.

The inquiry heard that New South Wales has considerable expertise in materials research, industrial design, advanced manufacturing, information and communication technology, complex systems integration, aircraft maintenance, and maritime sustainment. In addition, university and research institutions provide world class research and innovation to support defence capability and educate the future defence industry workforce.

The Defence Innovation Network established by the NSW Government in November 2017 is an important and much needed step in supporting defence research and development, and collaboration within the state. The committee recommends that the Defence Innovation Network's operations be secured with funding into the future.

In the discussion paper released by the committee in 2017, it was noted that stakeholders frequently called for the NSW Government to take the lead in delivering a coordinated and committed approach to Defence related advocacy and to prioritise projects which align with its key areas of advantage. It is clear that an area where New South Wales has an advantage is in complex systems integration and sustainment, as well as maritime maintenance and repair. The committee heard during the inquiry that the financial significance of sustainment work can be three to four times the value of constructing the asset.

The NSW Government has demonstrated a willingness to advocate for the placement of Defence assets in New South Wales and the involvement of New South Wales based industry in Defence investment projects which the committee hopes will continue. One such area where it is hoped that this advocacy will reap dividends is in the space industry. The announcement by the Commonwealth Government of an Australian Space Agency is an exciting opportunity. The appointment of Dr Paul Scully-Power AM to lead the New South Wales bid to have the agency based in the state is an important signal by the NSW Government of its commitment to growing this important future industry.

The defence industry in New South Wales is diverse in nature and made up of both large prime contractors as well as small and medium sized enterprises. The Western Sydney Aerospace and Defence Industry Precinct promises to be a hub for future growth of the defence industry in New South Wales. This will build on the large presence of defence enterprises in regions such as the Hunter and Shoalhaven. In the Hunter, for example, more than 4,000 people are directly employed in the defence industry which contributes to around 10 per cent of the gross regional product. It is important that the success of the Western Sydney Aerospace and Defence Industry Precinct does not come at the expense of those regions, but rather, allow for growth. The committee recommends that the NSW Government assist in the

establishment of new businesses in the Western Sydney Precinct and not facilitate the relocation of regionally-based businesses.

A common theme during the inquiry was the importance of a functional and accessible defence industry capability directory enhancing the visibility of the state's defence industry capability. A capability directory that is well maintained and current is an important tool in connecting local industry with prime contractors. It would greatly assist New South Wales to take advantage of Australia's increase in procurement and publicise the state's strength in sustainment.

On behalf of the committee, I acknowledge the Honourable Greg Pearce who began this inquiry and presented the discussion paper to guide our final deliberations. I thank those that have contributed to our work by making submissions to the inquiry and participating in public hearings. I also thank the secretariat for their assistance, including Alex Stedman, Emma Rogerson, Stephanie Galbraith, Lauren Evans, Rebecca Main and Jenelle Moore as well as Hansard reporters.

Hon Taylor Martin MLC

Toglande

Committee Chair

Recommendations

Recommendation 1

That the NSW Government continue to:

- implement the New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017 as the principal vehicle for supporting Defence and growing defence industries in New South Wales
- support Defence NSW in its role as the unit responsible for the implementation of New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017.

Recommendation 2 22

That the Parliament of New South Wales support the establishment of a Joint Committee on Defence and Space Industries in New South Wales.

Recommendation 3 24

That the NSW Government, including the Premier and relevant ministers, continue to advocate for:

- placement of Defence assets in New South Wales
- involvement of New South Wales based industry in Defence investment projects.

Recommendation 4 24

That the NSW Government appropriately resource Defence NSW to ensure that the policy objectives outlined within the New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017 are achieved.

Recommendation 5 25

That the NSW Government, having provided time for its newly established support structures to mature, publically commit to reconsidering the benefits of establishing a defence ministerial advisory committee.

Recommendation 6 38

That the NSW Government continues to invest in providing New South Wales based small and medium-sized enterprises with marketing and networking opportunities, so that they may better engage with primes and take advantage of potential domestic and international market opportunities.

Recommendation 7 38

That Defence NSW work with the Centre for Defence Industry Capability and other relevant stakeholders to ensure that commonwealth funded defence support opportunities are comprehensively utilised by New South Wales based industry.

Recommendation 8 43

That the NSW Government develop a New South Wales Defence Industry Capability Directory.

Recommendation 9 51

That the NSW Government look for opportunities to provide funding for initiatives that seek to:

- raise student awareness about career opportunities in Defence and the defence industry
- increase the number of students studying Science, Technology, Engineering and Mathematics (STEM) subjects.

Recommendation 10 51

That Defence NSW continue to work with all stakeholders to ensure the industry has access to the skills it needs to provide pathways to careers in the defence industry.

Recommendation 11 56

That the NSW Government assist new businesses to be established in the Western Sydney Aerospace and Defence Industry Precinct and not facilitate the relocation of regionally-based businesses.

Recommendation 12 59

That the NSW Government secure the future funding arrangements for the Defence Innovation Network so that it can plan and hire beyond a 12-month period.

Recommendation 13 59

That the NSW Government examine the possibility of increased resourcing for the Defence Innovation Network.

Recommendation 14 63

That the NSW Government continue its advocacy for the New South Wales space industry and efforts to secure the Australian Space Agency for New South Wales.

Recommendation 15

That the NSW Government:

- add space to the list of priorities in high-tech manufacturing alongside Defence
- seek an urgent report from the incoming NSW Chief Scientist and Engineer as to opportunities for New South Wales to join the national space effort.

Conduct of inquiry

The terms of reference for the inquiry were referred to the committee by the Hon Niall Blair MLC, Minister for Primary Industries, Minister for Regional Water, Minister for Trade and Industry on 3 May 2017

The committee received 36 submissions. It also received 16 responses to a discussion paper which it released in November 2017.

The committee held seven public hearings: one at Parliament House, Sydney, and six at regional locations including Nowra, Orange, Tweed Heads, Armidale, Newcastle and Queanbeyan. The committee held a final public roundtable at Parliament House following the release of the discussion paper.

The committee conducted three site visits to Nowra and Wollongong; the Hunter region; and Adelaide. The committee also met with officials from the Department of Defence in Canberra.

Inquiry related documents are available on the committee's website, including submissions, hearing transcripts, tabled documents, answers to questions on notice, the discussion paper and responses, and site visit reports.

Procedural issues

The committee released a discussion paper on 14 November 2017 which provided an overview of the key issues identified and sought stakeholder views on various questions developed in response to the issues raised.

The committee received 16 responses to the discussion paper. The committee subsequently held a final public roundtable with key inquiry stakeholders on 4 April 2018 to discuss potential areas of recommendation for the committee's report.

Chapter 1 The Defence industry in New South Wales

'Defence is important to NSW. NSW is important to defence'.4

Defence and the industry which supports it, makes a substantial contribution to the New South Wales economy and is an important driver of employment and economic growth in several of the state's regional centres. The Australian Government's commitment to invest over \$195 billion in Australian Defence capability over the next decade presents a significant opportunity for New South Wales to grow defence-related expertise, jobs and innovation.

This chapter presents the Australian Government's policy underpinning this Defence investment and outlines the NSW Government's approach to Defence and supporting the defence industry in New South Wales. It then provides an overview of the state's defence industry and the Australian Defence Force's presence in New South Wales. The chapter concludes by considering the economic value of Defence investment and the industry to New South Wales and its regional economies, and detailing the state's share of Defence investment.

The Australian Government

1.1 In recent years, there has been a strong commitment by the Australian Government to build Australia's defence capability and with it a strengthening of defence industry. This commitment is set out in a number of key policy documents including the 2016 Defence White Paper, the Integrated Investment Program, and the Defence Industry Policy Statement. This section provides a brief overview of the Defence policy landscape.

2016 Defence White Paper and the Integrated Investment Program

1.2 The Australian Government's 2016 Defence White Paper sets out a 'comprehensive, responsible long term plan for Australia's defence'. The purpose of the White Paper is to explain:

how the [Australian] Government is strengthening Australia's defence capabilities to meet the challenges of the more complex strategic environment Australia is likely to face in the years ahead. The Government's plan is for a more capable, agile and potent future force that has greater capacity to respond to strategic risk wherever Australia's defence interests are engaged.⁸

NSW Department of Industry, New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017, p 7. Hereafter referred to as The NSW Government Defence and Industry Strategy.

Submission 32, Department of Defence, p 1.

Australian Government, Department of Defence, 2016 Defence White Paper, http://www.defence.gov.au/WhitePaper/.

Australian Government, Department of Defence, 2016 Defence White Paper, http://www.defence.gov.au/WhitePaper/.

⁸ Australian Government, Department of Defence, 2016 Defence White Paper, p 29.

- 1.3 The 10 year *Integrated Investment Program* was published alongside the *White Paper* and outlines an investment of \$195 billion over the next decade⁹ to strengthen defence capability in areas such as equipment, infrastructure, information and communications technology, science and technology, and workforce.¹⁰
- 1.4 In both documents, the Australian Government recognises the important role that Australian industry plays in achieving Defence capability. The documents note both the 'enormous opportunities' as well as the accompanying 'challenges' that may face industry in responding effectively to these opportunities.¹¹

Australian industry involvement

- 1.5 The 2016 Defence Industry Policy Statement details the Australian Government's policy regarding Australia's defence industry. The purpose of the policy is to 'reset and refocus the Defence and industry partnership for improved delivery of Defence capability' to ensure that opportunities for competitive Australian businesses are maximised and the delivery of defence industry programs are streamlined.¹² The policy is structured around four key areas: delivering Defence capability; defence innovation; driving competitiveness and export potential; and cutting red tape.¹³
- Accordingly, the 2016 Defence Industry Policy Statement announced a \$1.6 billion investment in defence industry and innovation programs over the next decade to 2025-26.¹⁴ This investment included the establishment of the Centre for Defence Industry Capability (CDIC), which is coled by an advisory board comprised of private sector and Defence representatives.¹⁵ The purpose of the CDIC is to provide 'strategic leadership for the sector, and to help build the capability and capability of Australian industry to support the Australian Defence Force'.¹⁶ The CDIC focuses on delivering initiatives in three core areas: 'industry development, facilitating innovation, and business competitiveness and exports'.¹⁷
- Also outlined within the 2016 Defence Industry Policy Statement is the Australian Government's 'New approach to Defence innovation'. This included, among other things, the Next Generation Technologies Fund a \$730 million investment to the year 2025-26 in strategic technologies; and the Defence Innovation Hub a \$640 million investment to the year 2025-26 that will enable industry and Defence to undertake collaborative innovation activities throughout the capability life cycle.¹⁸

Note that investment is approximately \$200 billion from FY 2017/2018 to FY 2026-2027. Submission 32, Department of Defence, p 1.

Australian Government, Department of Defence, *Integrated Investment Program*, 2016, p.7.

Australian Government, Department of Defence, *Integrated Investment Program*, 2016, p 10.

Australian Government, Department of Defence, 2016 Defence Industry Policy Statement, p 10.

Australian Government, Department of Defence, 2016 Defence Industry Policy Statement, pp 10 – 11.

Submission 32, Department of Defence, p 1.

Submission 32, Department of Defence, p 2.

Australian Government, Department of Defence, 2016 Defence Industry Policy Statement, p 15http://www.defence.gov.au/whitepaper/Docs/2016-Defence-Industry-Policy-Statement.pdf.

Australian Government, Department of Defence, 2016 Defence Industry Policy Statement, p 16.

Australian Government, Department of Defence, 2016 Defence Industry Policy Statement, p 30.

- 1.8 More recently in May 2017, the Australian Government also released the *Naval Shipbuilding Plan* which outlined its plan for the largest renewal of Royal Australian Navy assets since the Second World War. This includes a \$90 billion investment in new naval capability and the sustainment of a larger and more complex naval fleet. The *Naval Shipbuilding Plan* notes that the naval shipbuilding workforce will need to expand considerably in order to achieve this. The establishment of a Naval Shipbuilding College in 2018, to be headquartered in Adelaide, is an important initiative in this regard.¹⁹
- 1.9 The most recent addition to defence industry related policy is the *Defence Export Strategy*. The Strategy was released in November 2017 and sets out 'a comprehensive system to plan, guide and measure defence export outcomes'. It provides an additional \$20 million from 2018/2019 to support Australia's defence exports with the aim of making 'Australia one of the top ten global defence exporters within the next decade'. ²¹
- 1.10 The Australian Industry Capability (AIC) Program is the major driver of Australian industry involvement in delivering Defence capability. The program requires tenderers for Defence procurement opportunities with a value of \$20 million and above, to include AIC plans which demonstrate how they will engage Australian industry. Tenderers are required to 'show their plans for Australian industry involvement over the life of a project, innovation and technology transfer, and export opportunities'.²²
- 1.11 In April 2018 the Department for Defence released its Defence Industrial Capability Plan which sets out a comprehensive plan for Australia's defence industry. It introduces a Sovereign Industrial Capability Assessment Framework and an initial list of 10 Sovereign Industrial Capability Priorities in areas that are critical to Defence.²³

The NSW Government

1.12 The NSW Government has also taken steps to refresh its approach to Defence and the defence industry. This section sets out the policy framework underpinning the NSW Government's approach.

New South Wales: Strong, smart and connected

1.13 New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017 (the NSW Government Defence and Industry Strategy) was launched in February 2017 by the Minister for Trade and Industry, the Hon Niall Blair MLC. The NSW Government Defence

Submission 32, Department of Defence, p 3.

Australian Government, Department of Defence, *Defence Export Strategy*, http://www.defence.gov.au/SPI/Industry/ExportStrategy/Default.asp.

Media release, Launch of job-creating Defence Export Strategy, 29 January 2018, https://www.minister.defence.gov.au/minister/christopher-pyne/media-releases/launch-job-creating-defence-export-strategy.

Submission 32, Department of Defence, p 6.

Australian Government, Department of Defence, Defence Industrial Capability Plan – Fact Sheet, p 1.

and Industry Strategy presents the NSW Government's vision for 'supporting Defence and growing defence industries and related jobs, investment and innovation across the state'.²⁴

- 1.14 The Defence and Industry Strategy sets out three core objectives:
 - Support Defence in its objectives
 - Assist Defence in the delivery of its ambitious acquisition targets
 - Maximise the economic opportunities for NSW businesses and communities.²⁵
- 1.15 Unpinning these core objectives are five 'key strategy areas', which are each supported by a series of initiatives. ²⁶ These are set out in the table below.

Table 1 Strategies and initiatives outlined within the Defence and Industry Strategy

	Strategies and initiatives outlined within the Defence and Industry Strategy			
	Strategy 1 – Foster stronger relationships with Defence and across the NSW defence industry at a state and regional level			
1A	Establish Defence NSW as the coordinating agency for all defence related activities for the NSW Government.			
1B	Support existing Defence establishments to prosper in NSW including closer engagement at a regional level to build defence supportive communities.			
1C	Collaborate with the Commonwealth, state/territory and local government to provide integrated services to Defence and industry.			
	Strategy 2 - Leverage NSW's strengths in critical capability areas to grow existing work and create new Defence and defence industry activity			
2A	Ensure NSW remains the leader in complex systems integration and sustainment.			
2B	Build on NSW's strengths in cybersecurity and space and promote collaboration between experts in Sydney and the Capital Region, and the ACT industry.			
2C	Target major defence projects to take place in NSW through coordinated campaigns.			
2D	Explore Western Sydney Airport as a future aerospace precinct through engagement and partnership with NSW and federal governments.			
Stra	tegy 3 – Provide Defence and industry with their future workforce			
3A	Promote interest and accessibility of STEM in NSW's secondary and tertiary institutions, and promote career paths in defence industry and technology through industry partnerships and incentive programs.			
3B	Work with Defence and industry to build on the training and education strengths in the Riverina, Hunter, Sydney and Capital regions.			

Submission 31, NSW Department of Industry, p 4

NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 11.

Submission 31, NSW Department of Industry, p 4. See also, NSW Department of Industry, *The NSW Government Defence and Industry Strategy 2017*, pp 11-15

	Strategies and initiatives outlined within the Defence and Industry Strategy			
Strat	Strategy 4 - Sustain and grow existing and new Defence and defence industry activity			
4A	Assist the Navy to manage its interests at a congested Fleet Base East and position NSW as a leader in maritime sustainment.			
4B	Promote the inclusion of Port Kembla steel products in ships and vehicle procurement.			
4C	Grow and connect regional networks to enhance collaboration and develop business opportunities.			
4D	Assist specialist small and medium enterprises to better access local and global supply chain and export opportunities.			
4E	Facilitate regional opportunities for the defence industry to invest and expand.			
	Strategy 5 – Increase opportunities for innovation, commercialisation and research within Defence and defence industry			
5A	Enhance Defence and industry collaboration networks with universities to enable faster development and commercialisation of technologies.			
5B	Support regional collaborations between prime contractors, SMEs and research institutions to develop defence capability.			

1.16 The Department for Industry advised that the Defence and Industry Strategy was developed in 'consultation with Defence, industry, associations, research institutions and across NSW Government'. The Defence and Industry Strategy notes that 'consultation sessions were held across New South Wales in important regional areas'. 28

Defence NSW and the NSW Defence Advocate

- 1.17 A central component of the NSW Government Defence and Industry Strategy is the establishment of Defence NSW. This is a dedicated unit within the NSW Department of Industry tasked with implementing the Defence and Industry Strategy and coordinating all defence related activities for the NSW Government.²⁹
- 1.18 Defence NSW was established in 2017. The unit is led by Commodore Peter Scott, CSC, RANR a former senior naval officer, and is supported by the NSW Defence Advocate Air Marshal (Retd) John Harvey AM.³⁰ At the time of writing, this dedicated unit comprised of the Director, plus four permanent staff. The NSW Defence Advocate is also contracted to the Department of Industry.³¹
- **1.19** The Department of Industry identifies the core responsibilities of Defence NSW as:

Submission 31, NSW Department of Industry, p 4.

NSW Department of Industry, *The NSW Government Defence and Industry Strategy 2017*, p 11.

NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 16.

Submission 31, NSW Department of Industry, p 5.

Evidence, Commodore Peter Scott, Director, Defence NSW, NSW Department of Industry, 4 April 2018, p 10.

- Advocating and promoting globally competitive and sustainable Defence industry
- Building industry skills and critical capabilities
- Connecting governments, Defence, industry and research institutions
- Delivering strategic priorities, and
- Building the Defence NSW reputation for turning strategy into reality.³²
- 1.20 Considerable support for the release of the NSW Government Defence and Industry Strategy and the establishment of Defence NSW was reported by inquiry participants. For example, Ms Anna Murray, Vice President, Australian Industry and Defence Network NSW, commented that the government's focus on Defence was crucial and not something that had traditionally been given much attention:

I represent AIDN NSW...we represent SMEs throughout the State not only into defence but also into some of the prime contractors as well. We welcome the new strategy for defence and the inquiry into defence industry, and we believe that it is crucial that the New South Wales Government gets involved at the highest level in defence issues, which to date we have not really seen.³³

1.21 The University of Wollongong similarly commented positively on the government's efforts and noted that Defence is very important to New South Wales regional economies:

The NSW Government have a critical role to play in coordinating greater collaboration across industry, government and academic institutions to foster the innovation and expertise required to build defence capability across Australia. UOW [University of Wollongong] supports the NSW Government's recent progress in this area through the NSW Government Defence and Industry Strategy 2017 (NSW Defence Strategy), and support for the emerging Defence Innovation Network (DIN). The NSW Defence Strategy's recognition of the importance of defence regional economies and communities throughout the document is very positive.³⁴

1.22 Notwithstanding this support, many inquiry participants emphasised the need for comprehensive implementation of the NSW Government Defence and Industry Strategy and identified opportunities where the NSW Government could further support defence industry growth. This is discussed further in Chapters 2 and 3.

Defence industry overview

1.23 The Australian Government defines the 'defence industry' as:

Submission 31, NSW Department of Industry, p 5.

Evidence, Ms Anna Murray, Vice President, Australian Industry and Defence Network NSW, 4 April 2018, p 3.

Submission 8, University of Wollongong, p 2.

the thousands of Australian businesses, men and women across the country who aren't in the Defence Force but use their expertise, experience and trade skills to supply and support it – they are The Workforce Behind the Defence Force.³⁵

1.24 Australian industry has a long history of designing, manufacturing and adapting products to meet the evolving capability needs of the Australian Defence Force. In New South Wales a diverse and innovative defence industry has developed to meet these requirements. This section provides a summary profile of the state's defence industry.

Industry profile

- 1.25 The defence industry in New South Wales is made up of a diverse range of businesses and organisations spanning the aerospace, maritime, land weapons and electronic systems sectors. The NSW Government estimates that some 6,500 are employed directly in defence industry in New South Wales, with significantly more (another 29,500) indirectly employed in supporting industries. The industries of the section o
- 1.26 Defence is responsible for some of Australia's largest and most complex procurement activities.

 38 The defence market which supports this procurement is made up of a broad industry base which is dominated by large global defence companies known as 'primes'. 39
- 1.27 The corporate nationality of these companies is largely American and European. Only the Australian Submarine Company (ASC), a Government Business Enterprise (GBE) of the Australian Government, boasts Australian origins. These global defence companies rely on their extensive domestic and international supply chains to deliver Defence projects. Many of these global companies have operations in New South Wales. At a national level, around 50 per cent of employment within the defence industry is attributable to prime contractors.
- **1.28** Mr Chris Williams, Executive Chair, Sydney Aerospace and Defence Interest Group explained the origins of this market structure advising that it was influenced by the historic procurement decisions of Defence:

The primes who are in Australia have been driven by procurement decisions. Navantia is here because we bought air warfare destroyers and LHDs. Boeing is here because we

Australian Government, *About the Defence Industry*, https://www.defenceindustry.gov.au/about-defence-industry.

Submission 32, Department of Defence, p 2.

NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 22.

Australian Government, Department of Defence, *Procurement and Contracting in Defence*, http://www.defence.gov.au/dmo/DoingBusiness/ProcurementDefence/.

Australian Government Business, *Introduction to the defence*, https://www.business.gov.au/Centre-for-Defence-Industry-Capability/New-to-Defence/Introduction-to-the-Defence-Industry.

Evidence, Mr Chris Williams, Executive Chair, Sydney Aerospace and Defence Interest Group, 3 August 2017, p 31.

Australian Government, Introduction to Defence Industry, Defence Supply Chains, https://www.business.gov.au/Centre-for-Defence-Industry-Capability/New-to-Defence/Introduction-to-the-Defence-Industry.

Australian Government Business, *Introduction to the defence*, https://www.business.gov.au/Centre-for-Defence-Industry-Capability/New-to-Defence/Introduction-to-the-Defence-Industry.

have got C17s and Hornets. Lockheed Martin is here because we have got combat systems and Joint Strike Fighters [JSF]. Northrop Grumman is here because of the unmanned surveillance aircraft. The primes are not here because it is a nice place to be. They are here because they have assets in country that they have been leveraging into maintenance work, which is very good, long-term work.⁴³

- 1.29 Small and medium enterprises⁴⁴ (SMEs) also have an important role to play in the defence market. While direct supply opportunities are limited, significant prospects exist for SMEs within the supply chains of prime contractors. By way of example, Mr Chris Jenkins, Chief Executive Officer of Thales Australia, explained that in New South Wales, his organisation engages more than 450 New South Wales based SMEs within its supply chain.⁴⁵
- **1.30** Illustrating further the nature of the Defence market place Mr Chris Williams explained that many SMEs specialise in niche products:

We end up with a market structure where there are thousands and thousands of little businesses that do one thing very well, oil-water separators for minehunters, hydraulic systems for aircraft, landing great for aircraft, rotor blades for helicopters, lots and lots of little companies. And those little companies are turning over between \$AU2 million and \$AU5 million, thereabouts.⁴⁶

Industry sectors

- 1.31 The defence industry in New South Wales is diverse and innovative. The Australian Government's Department of Defence sought to identify some sectors of particular significance for Defence and New South Wales industry, advising of the significant contracts secured in the aerospace, maritime, and Information and Communication Technology sectors. Considerable industry expertise can be found in areas such as 'materials research, industrial design, advanced manufacturing, information and communication technology (ICT) and complex systems integration'. 47
- 1.32 The aerospace sector in New South Wales includes companies such as Airbus, Boeing, Lockheed Martin, Raytheon and BAE Systems and their SME supply chains. The industry supports a number of significant Defence assets including the 'F/A-18 Hornet, Wedgetail Airborne Early Warning and Control Aircraft, Black Hawks, Navy rotary wing fleet, the C-130J, and initially the newly acquired C-27J'. This support includes repair and maintenance, as well as systems manufacturing contracts.⁴⁸
- 1.33 In November 2016, BAE Systems Australia was assigned the role of Southern Pacific Regional Depot Airframe Maintenance, Repair, Overhaul and Upgrade provider for the next generation of aircraft, the Joint Strike Fighter (or F35). This contract will see BAE Systems Australia support not only Royal Australian Air Force aircraft, but also the aircraft of neighbouring nations. The committee met with Mr Andrew Chapman, F35 Campaign Manager, who

Evidence, Mr Williams, 3 August 2017, p 31.

SMEs are typically defined as organisations with less than 200 employees.

Evidence, Mr Chris Jenkins, Chief Executive Officer, Thales Australia, 3 August 2017, p 37.

Evidence, Mr Williams, 3 August 2017, p 31.

NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 20.

Submission 32, Department of Defence, p 2.

explained the significant impact on industry that these global contracts can have, estimating that approximately 200 additional high tech jobs could be created during the jet's 30 years of service. 49 HunterNet and the Hunter Business Chamber presented early estimates of total anticipated impact (direct and indirect) on regional jobs associated with F35 maintenance to be significantly higher – estimating that some 1,056 jobs could be created as a result. 50

- 1.34 The Australian Government's Department of Defence advised that New South Wales industry has secured 'a sizable amount of maritime maintenance and upgrade contracts', noting in particular the work undertaken at Garden Island Precinct in Sydney (including the Captain Cook Graving Dock) the homeport for the Navy's major fleet units on the east coast. Companies such as Thales Australia and BAE provide capability to Defence in this sector. ⁵¹
- 1.35 New South Wales is also a 'national leader in the provision of Information and Communication Technology products and services' with many global ICT companies which support Defence capability having regional bases in Sydney. Companies include IBM, Cappemini and Adobe. 52

Research and development

- 1.36 Defence and defence industry are complemented by Research and Development (R&D) activities by leading universities and research institutions in New South Wales. These organisations not only provide world class research and innovation to support defence capability but are also responsible for providing the extensive undergraduate and postgraduate teaching programs required to equip the existing and future workforce for the defence industry.⁵³
- 1.37 Furthermore, the Defence Innovation Network (DIN) was formally established in November 2017. The DIN is a university led network to strengthen defence-related research and development activity across New South Wales. The network brings together leading scientists and engineers from seven of the state's universities to focus on areas which are fundamental to the capability needs of Defence. Future arrangements for the DIN are discussed in Chapter 3.

Supporting organisations

- 1.38 The defence industry is also represented by several industry and collaborative networks such as the Australian Industry and Defence Network, and the Australian Industry Group. Networks have also developed at more local levels and include groups such as the Sydney Aerospace and Defence Interest Group, Hunter Defence and the Shoalhaven Defence Industry Group also exist to drive collaboration, innovation and advocacy for the industry.⁵⁴
- 1.39 As noted above, the industry is supported at both federal and state government levels by a number of organisations. These include the Australian's Government's Centre for Defence

Standing Committee on State Development, NSW Legislative Council, Site visit report, The Hunter, 18 September 2017, p 5; Defence Connect, *Defence Prime targets local talent for aerospace careers*, 5 April 2018, https://www.defenceconnect.com.au/strike-air-combat/2111-defence-prime-targets-local-talent-for-aerospace-careers.

Submission 8, Hunter Business Chamber, p 7.

Submission 32, Department of Defence, p 2-3.

Submission 32, Department of Defence, p 3.

⁵³ NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 26.

Evidence, Commodore Scott, 3 August 2017, p 5.

Industry Capability, Defence NSW, NSW Department of Industry, and Regional Development Australia (who assist in a more general business development sense).⁵⁵

Defence presence in New South Wales

- 1.40 The Australian Defence Force is well represented in New South Wales. A large number of Defence bases and key platforms across maritime, land and air domains are located in the state. This includes all four operational command centres.
- 1.41 According to the NSW Department of Industry, 80 Defence bases and supporting facilities are operational in New South Wales more than any other state or territory in Australia.⁵⁶ The Department of Defence identifies 21 'significant' Defence-owned bases and training areas, noting that the majority have been operating in their current location for many decades.⁵⁷ The figure below shows the major defence bases in New South Wales.

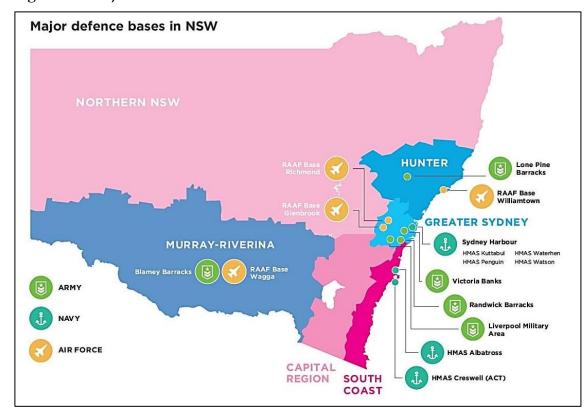


Figure 1 Major defence bases in New South Wales

Source: NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 21.

1.42 The Department of Defence confirms that 27,700 of its employees are located in New South Wales. This accounts for 26 per cent of the total Australian Defence workforce. 58 The workforce

Submission 32, Department of Defence, p 1.

Submission 31, NSW Department of Industry, p 3.

Submission 32, Department of Defence, p 25.

Department of Defence, Defence Annual Report 2015-16, p 95.

is comprised of permanent and reserve forces, and civilian personnel.⁵⁹ These employees are located across the state, with high concentrations found in the Hunter, Riverina, Illawarra and Shoalhaven regions.⁶⁰ Table 2 below sets out the location of Defence personnel across Australia.

Table 2 Location of Defence employees

State / Territory	Percentage of Defence Personnel
New South Wales	26 %
Queensland	22 %
Australian Capital Territory	19 %
Victoria	13 %
South Australia	7 %
Northern Territory	6 %
Western Australia	5%
Overseas	1 %
Tasmania	0 %

Source: NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 20.

Economic value of Defence investment in New South Wales

1.43 Defence investment makes a substantial contribution to New South Wales and its regional economies. The impact of Defence investment is particularly significant given the associated multiplier effects. This section sets out various indicators which demonstrate the economic impact of this investment at both a state and regional level. It concludes by presenting some future Defence investments expected in New South Wales.

Current defence investment and its significance

- 1.44 The NSW Government Defence and Industry Strategy reports that in 2014-2015 Defence expenditure in New South Wales amounted to \$7.9 billion. This was made up of \$5.5 billion in operational (recurrent) expenditure and \$2.4 billion in capital expenditure.⁶¹
- 1.45 There are significant direct and indirect benefits from Defence investment. For example, a major base upgrade will require input from professions including engineering services, local construction and other trades. Additionally, portions of salaries provided to local Defence personnel will be spent within the local areas where they are based.
- 1.46 As demonstrated by KPMG analysis presented within the NSW Government Defence and Industry Strategy, the multiplier effects resulting from Defence investment are significant. The strategy reports that for every \$1 billion of recurrent Defence expenditure invested in New

⁵⁹ Submission 32, Department of Defence, p 2.

NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 23.

NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p. 6.

South Wales, an uplift of \$1.4 billion is achieved to the Gross State Product (GSP). Furthermore, an increase in Defence investment also leads to employment growth. For every \$1 billion invested in NSW Defence operations, some 10,000 jobs are supported. This comprises 3,500 Defence jobs plus 6,500 jobs in other sectors.⁶²

1.47 Mr Greg Pullen, Economic Development Manager, Shoalhaven City Council, also identified the higher order benefits of the defence sector to a local economy. To demonstrate this, Mr Pullen presented figures which compared the greater benefits delivered to the Gross Regional Product derived from 500 jobs in the defence sector, against the more limited benefits delivered from 500 jobs in the tourism sector. This analysis is presented in the table below.

Table 3	Comparative figures Shoalhaven Defence v Tourism
---------	--------------------------------------------------

Shoalhaven and Jervis Bay Territory	ervis Defence Industry Sector		· ·		Tourism Ind	ustry Sector
Employment	1672	5.70 %	3284	11.30 %		
Wages and Salaries	\$344.0 million	14.10 %	\$140.7 million	5.80 %		
Contribution to Gross Regional Product	\$479.8	10.70 %	\$220.5	4.90 %		

Source: Tabled document, Supplementary information submitted by Greg Pullen, Economic Development Manager, Shoalhaven City Council, p.7.

- 1.48 The NSW Government Defence and Industry Strategy also presents analysis which demonstrates the benefits delivered by Defence investment to certain industry sectors. The NSW Government Defence and Industry Strategy states that 'while the biggest direct impacts are experienced in the defence sector, more than half of the value-added impacts (contribution to GSP) flow to other sectors that supply Defence'.⁶⁴
- 1.49 As demonstrated by the figure below, the most notable increases are 'observed in the construction and business service sectors' as these industries benefit from increased demand for their products and services from the defence sector. Trade, transport and telecommunication sectors also benefit from Defence investment as 'a result of additional business and household demand for their outputs'. 65

NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p. 8.

Evidence, Mr Greg Pullen, Economic Development Manager, Shoalhaven City Council, 29 June 2017, p 49.

NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 23.

NSW Department of Industry, *The NSW Government Defence and Industry Strategy 2017*, p 25.

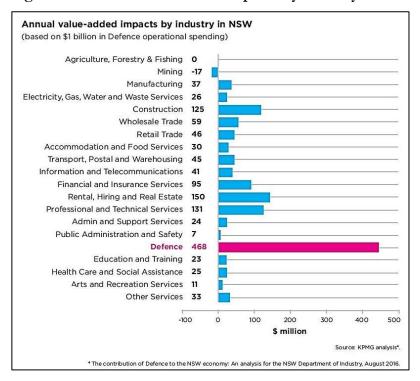


Figure 2 Annual value-added impacts by industry in New South Wales

Source: Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 24.

Regional significance

1.50 The NSW Government Defence and Industry Strategy also demonstrates the significance of Defence and defence industries for certain regional areas in New South Wales. The figure below shows the extent of defence related employment as a share of total regional employment, and clearly illustrates the importance of Defence and defence industry employment in areas such as: the Southern Highlands and Shoalhaven (9.1 percent); the Riverina (8 percent); and Hunter Valley including Newcastle (4.2 per cent).

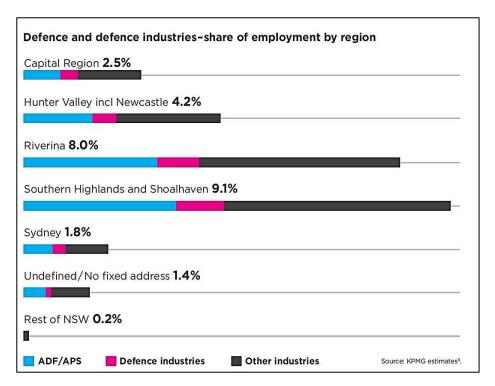


Figure 3 Defence and defence industry – share of employment by region

Source: Department of Industry, The NSW Government Defence and Industry Strategy, p 23

New South Wales share of Defence investment

- 1.51 New South Wales is host to a substantial Defence presence and has developed a diverse and capable industry base to service its capability needs. However, the NSW Government Defence and Industry Strategy reports that 'in recent years the relative contribution' of the Defence budget in New South Wales has 'declined in recent years with the expansion of Defence activities in other states'. 66
- 1.52 The production of comprehensive comparative data of Defence expenditure presents a number of challenges and is difficult to access. ⁶⁷ However, information provided by Defence NSW provides some indication as to New South Wales' performance, as measured by Defence employment relative to the size of its population against other selected states and territories. This information is set out in the table below. It shows that despite having 32 per cent of the Australian population, and contributing 31 per cent of the Gross National Product, only 26 per cent of defence employment and investment occurs in New South Wales. It is also worth noting that the high percentage of Defence employment in the Australian Capital Territory, relative to its share of the Australian population, is attributable to the location of Department of Defence headquarters and agencies. ⁶⁸

NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 21.

Answers to questions on notice, Defence NSW, 1 September 2017, p 1.

Answers to questions on notice, Defence NSW, 1 September 2017, p 1.

Table 4 Comparative indicators of Defence employment and investment by State

State	% of Defence Employment	% of Defence Investment	% of Australian Population	% of Gross National Project
New South Wales	26 per cent (2014/2015)	26 per cent of total defence expenditure (2014/2015)	32 per cent (2016)	31 per cent (2015/2016)
Victoria	13 per cent (2014/2015)	Not provided.	26 per cent (2016)	Not provided.
ACT	17 per cent (2014/2015)	Not provided.	2 per cent	Not provided.

Source: Answers to questions on notice, Defence NSW, 1 September 2018, p 1

1.53 Commodore Peter Scott advised that 'exhaustive enquiries' have been made to locate data that would enable a more authoritative comparison between New South Wales and other states and territories. However, a number of gaps in the available data have prevented this. Commodore Scott further advised that given 'the nature of Defence reporting and the sensitivity of commercial data held by each state, [there] will remain obstacles to a detailed comparison in the short term'.⁶⁹

Committee comment

- 1.54 It is clear that Defence and the industry that supports it, makes a substantial contribution to the New South Wales economy and is a key driver of employment and economic growth in many of the state's regional centres. The unprecedented commitment by the Australian Government to invest \$195 billion in Australian Defence Force capability over the next decade presents considerable opportunity for New South Wales industry. It is therefore vital that New South Wales position itself to take advantage of this opportunity for industry growth and economic development.
- 1.55 At the onset of this report, it is important to acknowledge the relatively new policy landscape within which this inquiry has been conducted. The NSW Government has taken steps to strengthen its focus on Defence and defence industry through the release of *New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017* (The NSW Government Defence and Industry Strategy) and the establishment of Defence NSW. These are undoubtedly important first steps and the committee supports the work undertaken by Defence NSW, the NSW Defence Advocate, and the Department of Industry to date.
- 1.56 Throughout this inquiry the committee has been fortunate to meet with a diverse range of industry leaders who are driving the development of world-class capabilities for the Australian and other international defence forces. The committee is pleased that industry and relevant organisations have welcomed the NSW Government's efforts in the Defence and defence industry policy area. It is also evident that the key strategy areas outlined within the NSW

Answers to questions on notice, Defence NSW, 1 September 2017, pp 1-2.

- Government Defence and Industry Strategy have been informed by comprehensive consultation with industry representatives.
- 1.57 The committee endorses the continued implementation of the NSW Government Defence and Industry Strategy as the principal vehicle for supporting Defence and growing defence industries in New South Wales. Furthermore, the committee expresses its ongoing support for Defence NSW in its role as the unit responsible for the implementation of the NSW Government Defence and Industry Strategy.
- 1.58 Notwithstanding this endorsement, the committee has received valuable evidence from industry representatives on what the NSW Government can do from here to maintain this momentum. This evidence will be considered in further detail in the subsequent chapters of this report. In this first instance it is recommended that the NSW Government continue to:
 - implement New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017 as the principal vehicle for supporting Defence and growing defence industries in New South Wales
 - support Defence NSW in its role as the unit responsible for the implementation of the NSW Government's New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017.

Recommendation 1

That the NSW Government continue to:

- implement the New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017 as the principal vehicle for supporting Defence and growing defence industries in New South Wales
- support Defence NSW in its role as the unit responsible for the implementation of New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017.

Chapter 2 Leadership and resourcing

This chapter looks at the need for strong leadership and advocacy in promoting Defence in New South Wales and the state's defence industry. The leadership and advocacy efforts to date of the NSW Government are considered along with the suggestion that a ministerial council or advisory board should be established to guide future activity. The chapter concludes by reviewing the resources Defence NSW has to achieve the policy objectives outlined within New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017.

The need for strong leadership and advocacy

- 2.1 New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017 (The NSW Government Defence and Industry Strategy) sets out the NSW Government's commitment to engage with the Australian Government and Defence. The NSW Government Defence and Industry Strategy states that at the national level, 'political engagement and leadership will be provided by the Premier, the Minister for Industry, other ministers and the NSW Defence Advocate'. It further states that collectively, these state representatives will:
 - ensure alignment with Australian Government and relevant federal Ministers and oversee joint initiatives
 - manage the strategic relationship with Defence
 - manage the strategic relationship with international and national prime contractors
 - ensure alignment with other states and territories.⁷⁰
- 2.2 The need for strong political leadership to promote and advocate for the defence industry in New South Wales was raised by numerous inquiry participants.
- 2.3 For example, Mr Chris Williams, Executive Chair, Sydney Aerospace and Defence Interest Group (SADIG), which represents some 200 organisations in the greater Sydney region, said that the most important step the government could take to support defence industries was to provide 'fierce' and sustained advocacy for the placement of appropriate defence assets in New South Wales. Mr Williams explained that this would provide opportunities for state based industry to undertake valuable and long term sustainment work:

Department of Industry, New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy, 2017, p 15. Hereafter referred to as the NSW Government Defence and Industry Strategy.

Fierce advocacy for structuring, involving what makes sense to New South Wales assets, but really having serious, ongoing discussions about what the right amount of assets for New South Wales is in terms of submarines, Joint Strike Force. What makes sense but also making sure we do not let things drop off the back of cart because we have gone back to sleep in two years' time. It is not a two-year play; it is a 10-year play or a 20-year play. That base load of 25 per cent that is there on sustainment and assets. That build numbers will go up and down year by year but that base load will stay. That is the good, long-term meaningful work which means you can go and get graduates, you can get trainees, but you have got to have meaningful work, and that starts with where the assets are to be sustainable in the long term for the long game. 71

2.4 This position was echoed by the Australian Industry and Defence Network New South Wales (AIDN NSW), a peak industry body representing 120 SMEs in the defence and security industry sectors. Ms Anna Murray, Vice President, AIDN NSW stated that her organisation believed that the defence industry would benefit from additional attention from the government:

We have the capability. We have a lot...of very smart SMEs. We have a lot of capability here and a lot of very innovative small companies and they will greatly benefit from some assistance and attention from the New South Wales Government into defence industry.⁷²

2.5 AIDN NSW explained that governments in other jurisdictions already had well-established mechanisms in place to engage with Defence decision makers, and that these mechanisms were already influencing prime contractors on the location of their facilities for key projects:

The whole of government mechanism in other states are already influencing potential prime contractors on the location of their facilities for projects. The more these companies locate outside NSW, the more likely it is that their supply chain will be outside NSW to be near them. This may even be the case where a NSW company has a better product or service, or is better placed to form a mutually beneficial relationship with the prime contractor.⁷³

2.6 Thales Australia, a prime contractor operating in the defence market, also advised that bipartisan support was required by the NSW Government to ensure that economic opportunities arising from the Australian Government's investment plans are not lost to other states and territories:

The Commonwealth Government's substantial increase in Defence spending has led to a rise of competitive Federalism, with each state and territory eager to maximise the economic impact for the companies based within their boundaries ... The Commonwealth and Opposition must move quickly and with bi-partisan purpose to maximise the opportunities for NSW based companies from the Commonwealth Government's investment in defence capability. Time is of the essence as other Government's look to maximise their economic benefit at the expense of slower moving rivals.⁷⁴

Evidence, Mr Chris Williams, Chair, Sydney Aerospace and Defence Interest Group, 4 April 2018, p 15.

Evidence, Ms Anna Murray, Vice President, Australian Industry and Defence Network NSW, 4 April 2018, p 3.

Submission 16a, Australian Industry and Defence Network NSW, p 2.

Submission 28, Thales Australia, p 5 and p 8.

Calls for the establishment of oversight and advisory bodies

- 2.7 Some inquiry participants called for the establishment of a ministerial council or advisory board which could oversee and inform the government's approach to developing the defence industry in New South Wales.
- 2.8 Charles Sturt University emphasised the importance of a collaborative, whole of government approach given the economic significance of Defence investment, particularly for the regions. On that basis, the university recommended that a 'Ministerial Council for Defence Industry Development' be established 'to champion, govern and oversight the whole-of-government approach to management of the defence industries in New South Wales'.⁷⁵
- 2.9 Charles Sturt University proposed that membership of the ministerial council comprise representatives of the defence industry, scientific and community sectors, and that its responsibilities include oversight of investment targets, programs and projects for defence spending in New South Wales.⁷⁶
- 2.10 Professor Andrew Vann, Vice Chancellor, Charles Sturt University, argued that the regional element to the NSW Government Defence and Industry Strategy could be supported by establishing a subcommittee within the proposed ministerial council:

The policy outcomes and program objectives sought by the State will be maximised through effective governance arrangements that are not only representative but skills based. To this end we recommend the establishment of a Ministerial Council for defence industry development; and strengthening the regional development element of the Government's policy by establishing a committee of the Ministerial council for defence industry development in the regions. This committee would work towards maximising the regional economic benefit attained from the colocation of defence bases and defence industries in the State's regional centres.⁷⁷

- 2.11 The discussion paper sought comment from inquiry participants on the need for enhanced governance arrangements, such as a Ministerial Council for Defence Industry Development, to support the NSW Government Defence and Industry Strategy. While almost all respondents agreed that enhanced ministerial engagement was desirable and important for the industry, there was less agreement on how this should be implemented.
- 2.12 Mr Chris Williams suggested that a ministerial council could add value in increasing the visibility of the sector and in undertaking advocacy activities:

I think it has probably got two roles: one is that it increases the visibility of the industry and what the team in Defence NSW is trying to achieve across the broader parliamentary landscape. The other piece is advocacy—that is incredibly important ... Having been in and around the Canberra service for the last 10 years, New South Wales was non-existent until the sort of work that the Defence Advocate has done in terms of just knocking on the door of the chief of the Defence Force saying, "We're here, we're available, we're interested." Having that board…means that those linkages and

Submission 26a, Charles Sturt University, p 3.

Submission 26, Charles Sturt University, p 7 and p 15.

Evidence, Professor Andrew Vann, Vice Chancellor, Charles Sturt University, 14 August 2017, p 44.

those discussions give you that communication channel back into Canberra where a number of these high-level discussions and decisions are made.⁷⁸

- 2.13 The Australian Industry Group NSW (Ai Group NSW) also expressed support for the establishment of a ministerial council or similar. The Ai Group NSW stated that there is 'commercial risk arising from policy instability, implementation failure or lack of will'. According to the Ai Group NSW, the perception of these risks within the industry had historically 'been an active element in discouraging firms from pursuing otherwise attractive defence opportunities'. 79
- 2.14 Ai Group NSW argued that 'it was vital that the NSW Government establish effective mechanisms to deliver on its defence strategy'. Ai Group NSW also recommended that this mechanism must be cognisant of the work of other states and the Commonwealth, 'to avoid competitive or duplicative inefficiencies in a policy area that best thrives in a national collaborative effort'. 80
- A more cautious response to the proposed establishment of an additional level of ministerial oversight was expressed by government representatives. Mr Duncan Challen, Executive Director, NSW Department of Industry agreed that the government had 'a very important role to play in terms of advocacy'. However, he stated that ministers already promote the state's defence sector and argued that consideration be given to leveraging existing mechanisms:

Obviously, the Government has a very important role to play in terms of advocacy in the State, across the country and also internationally. However, we must also recognise that the Premier, the Deputy Premier, Minister Blair and Minister Ayres have been great advocates for the defence sector. Whenever they can they have been promoting the strength of our capabilities in New South Wales. We also should consider how to use the Parliamentary Friends of Defence. If we are going to create another layer on top of that, we need to think about what outcome we want to drive. We have mechanisms in place that are starting to work better than they might have for a while. That is the point to note. Perhaps we should leverage what we already have and keep driving and getting the Premier, the Deputy Premier, Minister Blair and Minister Ayres to keep doing what they are doing.⁸¹

2.16 Commodore Peter Scott, Director, Defence NSW, was of the opinion that enhanced governance arrangements might be worth pursuing. However, according to Commodore Scott the real question is the issues of additional oversight compared to additional functionality:

It might be an opportunity...I think the value would depend on the construct, and I think that it would be worth asking questions about the relative value of additional oversight compared to potentially additional functionality. That would be my broad comment. But I think it is certainly something that is worth considering by the Committee and worth considering by relevant Ministers.⁸²

Evidence, Mr Williams, 4 April 2018, p 11.

Submission 40, Australian Industry Group NSW, p 3.

⁸⁰ Submission 40, Australian Industry Group NSW, p 3

Evidence, Mr Duncan Challen, Executive Director, Industry Development, NSW Department of Industry, 4 April 2018, p 11.

Evidence, Commodore Peter Scott, Director, Defence NSW, NSW Department of Industry, 4 April 2018, p 10.

- 2.17 The NSW Government Defence and Industry Strategy states that Defence NSW will meet regularly with a Defence Industry Advisory Group to 'ensure regular dialogue on key issues'. It further states that 'Defence NSW will coordinate biannual forums with the Defence Industry Advisory Group to report on the implementation of the strategy and to develop future directions'.⁸³
- 2.18 Commodore Scott advised that while the formation of a Defence Industry Advisory Group was anticipated at the time the NSW Government Defence and Industry Strategy was released, this initiative did not proceed. The reason for the decision has not been definitively confirmed. However, Commodore Scott noted that it may potentially relate to 'sensitivities surrounding the number of committees supporting the government at that time'.⁸⁴

Calls for bi-partisan support

- 2.19 The NSW Department of Industry stated that 'a consistent NSW Government approach to the Commonwealth Government is particularly critical in the areas of Defence'. 85
- 2.20 According to the department a consistent approach will be achieved through bi-partisan support which 'will build Defence's confidence in state level support for the sector'. The department also argued that this may support favourable investment outcomes by Defence and investment decisions by industry.⁸⁶
- 2.21 Initiatives such as the *Parliamentary Friends of Defence* were welcomed by the NSW Department of Industry as effective mechanisms to 'demonstrate political will and support for Defence'. 87 However, the government suggested that this group was not being 'used as much as it could be'. 88

Committee comment

- 2.22 The timelines associated with defence procurement mean that bipartisan support is required in order to engage with the decision makers in Defence.
- 2.23 The committee is of the view that this requires a point of engagement for Defence NSW to the Parliament of New South Wales which allows a bipartisan, long term, informed discussion across the Parliament with the goal of supporting the state to engage strategically with the Federal defence procurement machinery.
- 2.24 The Parliamentary Friends of Defence has as a role here, although such engagement could be better supported by the creation of a Joint Committee on Defence and Space Industries to be established by the Parliament of New South Wales. Such a committee would be established upon bipartisan lines and would be briefed by Defence NSW on a regular basis. It is

NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 17.

Correspondence, Commodore Scott, Director, Defence NSW, NSW Department of Industry, 15 May 2018.

Submission 31, Defence NSW, NSW Department of Industry, p 6.

Submission 31, Defence NSW, NSW Department of Industry, p 6.

Submission 31, Defence NSW, NSW Department of Industry, p 7.

Evidence, Mr Challen, 4 April 2018, p 11.

recommended that the Parliament of New South Wales support the establishment of a Joint Committee on Defence and Space Industries in New South Wales.

Recommendation 2

That the Parliament of New South Wales support the establishment of a Joint Committee on Defence and Space Industries in New South Wales.

Resourcing Defence NSW

- 2.25 As outlined in Chapter 1, Defence NSW has five staff comprising a director and four permanent staff. The NSW Defence Industry Advocate, Air Marshal (retired) John Harvey AM, is also contracted to the Department of Industry. 89
- 2.26 Some inquiry participants sought to highlight the greater levels of resourcing allocated to comparable organisations in other jurisdictions. The implication was that this put industry in other states at a competitive advantage over New South Wales based firms.
- **2.27** For example, Ms Anna Murray, AIDN NSW, compared the resources allocated by the South Australian Government with the resources available to Defence NSW. She noted a significant disparity:

Commodore Scott and Mr Challen are doing some great things...but the companies that we talk to in South Australia, for example, have a whole government department effectively—a small department that looks after their interests and promotes them and works with them with the overseas companies.⁹⁰

- **2.28** Similarly, Mr Bob Hawes, Chief Executive, Hunter Business Chamber stated that 'Peter Scott and John Harvey cannot do everything because there are limited resources in the Department'. 91
- **2.29** Commodore Scott advised that Defence SA is the largest government body dedicated to defence of all the state jurisdictions. He noted that Defence SA is comprised of:
 - An executive team of three: a Chief Executive and two executive directors
 - Four directors each with specific responsibility for aerospace, maritime, land and space operations
 - Approximately 20 support staff.⁹²
- **2.30** Defence SA is governed by the Premier of South Australia, as the Minister for Defence Industries and a Defence Advocate who is former Chief of Navy. 93

Evidence, Commodore Scott, 4 April 2018, p 10.

Evidence, Ms Murray, 4 April 2018, p 9.

Evidence, Mr Bob Hawes, Chief Executive Officer, Hunter Business Chamber, 4 April 2018, p 23.

Evidence, Commodore Scott, 4 April 2018, p 42.

Evidence, Commodore Scott, 4 April 2018, p 42.

- 2.31 An advisory board also exists which provides 'high level strategic and policy advice to promote the growth of Defence and defence industries and advocates on behalf of the State of Defence and defence industries issues'. ⁹⁴ The Defence SA website states that the Board is chaired by 'a formidable line-up of Australia's top Defence and industry experts, led by Chairman and former Chief of the Defence Force Air Chief Marshal Sir Angus Houston AK AFC'. ⁹⁵
- 2.32 Reflecting on the comparative resources directed towards the defence industry in New South Wales, Mr Challen advised that it was important not to consider Defence NSW resources in isolation. He stated that other parts of the government were also working to support the defence sector. This included Training Services NSW and the Office of Regional Development. According to Mr Challen, the issue is how to be smarter in using the resources that are available:

It is also worth considering that when we look at Defence NSW, the unit itself, there are other parts of the Department of Industry that are supporting the sector. We have got Training Services NSW, which is looking at the skills challenge that we have got; we have got a sector based in Western Sydney and that links into the Office of Regional Development—so we have got people in the regions that are doing activities around defence and defence industries; we are setting up a specific office in Liverpool to develop the precinct. So I think we have to be careful that when we look at the size of the resources that are available we do have other resources that we are applying to the defence sector—it is just not branded "Defence NSW". Collectively, there are a lot of people that are working with advanced manufacturers that are not sitting in Peter's team; there are a lot of people working with cybersecurity industries that are not sitting in Peter's team; also Medtech and so on. I think we need to be careful—of course, with more resources you can do more, but we need to be smarter in how we use our resources. ⁹⁶

Committee comment

- 2.33 The defence sector in New South Wales exists in an environment of interstate competition. The committee agrees with industry representatives that strong and sustained political leadership and advocacy is required to effectively support the defence industry in New South Wales. The question for the committee is whether existing approaches as outlined within *New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017* are sufficient (The NSW Government Defence and Industry Strategy).
- 2.34 The committee heard that New South Wales has historically had a reputation of being 'unfriendly' to Defence. According to some inquiry participants this has resulted in New South Wales having a smaller share of Defence investment than what it should have given its population size and considerable expertise in areas relevant to the defence industry.
- 2.35 The committee is confident that New South Wales is now better positioning itself to take advantage of the economic opportunities provided by Defence. The work of Defence NSW and the Defence Advocate for NSW demonstrates a renewed focus and commitment to Defence.

South Australia The Defence State, Defence SA Advisory Board, http://www.defencesa.com/about-defence-sa/defence-sa-advisory-board

South Australia The Defence State, Defence SA Advisory Board, http://www.defencesa.com/about-defence-sa/defence-sa-advisory-board

Evidence, Mr Challen, 4 April 2018, p 10.

It is encouraging that the Premier and other ministers are engaging with the Australian Government, federal ministers, Defence, and international prime contractors to promote New South Wales.

- 2.36 The committee believes that the advocacy commitments outlined within the NSW Government Defence and Industry Strategy are appropriate. The committee notes that other Australian states fiercely promote their capabilities. The committee urges the Premier and relevant ministers to be unapologetically proactive in promoting the significant industrial capabilities that exist within New South Wales.
- 2.37 It is therefore recommended that the NSW Government, including the Premier and relevant ministers, continue to advocate for:
 - placement of Defence assets in New South Wales
 - involvement of New South Wales based industry in Defence investment projects.

Recommendation 3

That the NSW Government, including the Premier and relevant ministers, continue to advocate for:

- placement of Defence assets in New South Wales
- involvement of New South Wales based industry in Defence investment projects.
- 2.38 It is important that the advocacy efforts of the Premier and relevant ministers receive strong support from an adequately resourced Defence NSW. It is acknowledged that Defence NSW is not the only area within the NSW Government supporting the state's defence sector. The committee acknowledges the significant economic value of Defence to New South Wales and believes it is worthy of investment.
- 2.39 It is crucial that the body with primary responsibility for driving the policy objectives outlined within the NSW Government Defence and Industry Strategy is appropriately resourced. The committee recommends that the NSW Government appropriately resource Defence NSW to ensure that the policy objectives outlined within the NSW Government Defence and Industry Strategy are achieved.

Recommendation 4

That the NSW Government appropriately resource Defence NSW to ensure that the policy objectives outlined within the New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017 are achieved.

2.40 The committee acknowledges the calls for the establishment of a ministerial council or advisory board to oversee the implementation of initiatives designed to grow and support Defence and the defence industry in New South Wales.

2.41 The committee recommends that the NSW Government, having provided time for its newly established Defence and defence industry support structures to mature, publically commit to reconsidering the benefits of establishing a defence ministerial advisory committee.

Recommendation 5

That the NSW Government, having provided time for its newly established support structures to mature, publically commit to reconsidering the benefits of establishing a defence ministerial advisory committee.

LECTEL	ATTX 7T7	COUNCIL.	
\perp \vdash \cup \vdash \cup \vdash \cup \vdash \cup \vdash \cup	$A \cap V \vdash$	COUNCIL	

Chapter 3 Supporting defence industry growth

The New South Wales defence industry has a strong reputation in areas critical to Defence capabilities. This chapter sets out common opinion from industry, academia and government representatives on how this position can be strengthened. It begins with a discussion on the need for New South Wales to focus on projects relevant to the state's strengths and to increase the accessibility of defence markets for small and medium enterprises. Measures to enhance industry capability, visibility and involvement in Defence projects are then considered. The chapter continues by looking at how the state's defence industry workforce can be supported. The chapter concludes by identifying potential opportunities to support defence industry growth. This includes the development of aerospace precincts, more effectively supporting research and innovation initiatives, and promoting the state's space sector.

Prioritising projects which focus on the strengths of New South Wales

3.1 The New South Wales defence industry has a strong reputation in areas critical to Defence. It was widely acknowledged that to take advantage from increased Defence investment that the NSW Government must build on the state's areas of strength in critical capability areas.

The NSW Government position

- 3.2 As outlined in Chapter 1, Defence's investment program will provide opportunities for local industry to support Defence's requirements in acquisition and sustainment.
- 3.3 The Department of Defence advised that with many investments based on a national approach that is 'location agnostic' it will be incumbent on state governments and their state-based defence industry to:
 - Assess their respective industry strengths
 - Leverage relevant Commonwealth programs
 - Partner with the prime contractors competing for projects so as to maximise local industry involvement.⁹⁷
- New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017 (the NSW Government Defence and Industry Strategy) identifies the state's strengths in areas such as systems integration, cybersecurity advanced materials, complex systems integration and sustainment. Strategy item number 2 sets out the government's commitment to build on these strengths and identifies the following high level initiatives:
 - ensuring that New South Wales remains Australia's leader in complex systems integration and sustainment
 - building on New South Wales's strengths in cybersecurity and space and promoting collaboration between experts in Sydney and the Capital Region, and ACT industry
 - targeting major defence projects to take place in New South Wales through coordinated campaigns including Joint Strike Fighter (AIR6000), Air Force's Future Battle

Submission 32, Department of Defence – Australian Government, p 4.

Management System (AIR6500), Combat Reconnaissance Vehicles (LAND400) and Future Submarines (SEA1000), Offshore Patrol Vessels (SEA1180) and Future Frigate (SEA5000)

- exploring the Western Sydney Airport as a future aerospace precinct through engagement and partnership with the NSW Government and Australian Government.⁹⁸
- **3.5** Defence NSW provided some specific examples of projects that had been delivered under the strategy:
 - NSW Government investment in the Port of Newcastle, in partnership with Thales Australia (see below case study)
 - an incentive package for bidders of the Land 400 Phase 2 project
 - regular support of the promotion of supply chain opportunities relating to maritime acquisitions platforms
 - enabling New South Wales based small and medium enterprises to participate at the Pacific 2017 maritime expo and other industry roadshows.⁹⁹

Revitalising marine sustainment capability at the Port of Newcastle – Thales Australia¹⁰⁰

Thales Australia is a prime contractor for the Australian Defence Force. In New South Wales, Thales employs 1,900 staff in eight major sites, and engages more than 450 New South Wales small and medium enterprises within its supply chain.

In June 2017, Thales Australia and the NSW Government announced plans to renew the Fitzroy Street shipyard slipway to reactivate the Port of Newcastle and the Hunter as a major marine ship repair and maintenance precinct.



The committee met with representatives from the Thales facility at Carrington in September 2017 and were briefed on the proposals which will create an expected additional 70 new jobs for the Hunter.

The proposal comprises a three-step plan to re-establish both naval ship repair and commercial capabilities in the Newcastle region. The first phase consists of a 12 month remediation process of Fitzroy Street wharf. This will include the construction of a slipway and the reactivation of the main

⁹⁸ NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 13.

⁹⁹ Submission 31, NSW Department of Industry, p 8.

Evidence, Mr Chris Jenkins, Chief Executive Officer, Thales Australia, 3 August 2017, p 37; Standing Committee on State Development, NSW Legislative Council, *Site visit report The Hunter, 18 September 2017*, pp 2-3.

warehouse maintenance facility. Once completed, the ship repair facility will be operational and available for small to medium sized vessels.

The second phase will involve the re-establishment of large ship lifting and maintenance capabilities; and the establishment of a marine disposal facility.

The final phase will establish a secure disposal facility that is compliant with the International Traffic in Arms Regulations (ITAR). The construction time of the disposal facility will be 9 months. After construction is completed, an environmentally compliant disposal facility will be available to Defence.

The value of sustainment and maintenance

- 3.6 Sustainment and maintenance of Defence assets represents an important and valuable opportunity for the defence industry. Mr Chris Williams, Executive Chair, Sydney Aerospace and Defence Interest Group, illustrated the financial significance of sustainment work. He advised that the value of sustaining an asset could be three to four times the value of constructing that asset throughout its lifetime.¹⁰¹
- 3.7 Several industry representatives reflected on the significant opportunities that existed for New South Wales in the areas of maintenance and sustainment.
- 3.8 For example, Mr Chris Jenkins, Chief Executive Officer of Thales Australia also acknowledged the significant opportunities that existed for New South Wales in the areas of maintenance and sustainment. Mr Jenkins advised that New South Wales has great strengths in smart systems and sustainment. He stated that if the state were to capture its fair share of investment in this area, it would generate considerable economic benefits:

The scale of the current investment in defence capability means that in order for the Australian Defence Force to get the platforms and systems it requires, each State needs to focus on its strengths. We believe the New South Wales strengths are the smart systems and sustainment that enable the next generation of platforms to deliver the highest levels of capability for the Australian Defence Force. If New South Wales were to capture its fair share of these systems it would drive investment and employment well beyond the time frame of individual programs and would generate second and third order economic benefits for the New South Wales economy. 102

Opportunities provided by the Naval Shipbuilding Program

- 3.9 The Naval Shipbuilding Program through the SEA1000 (future submarines) and SEA500 (future frigates) programs presents opportunities for New South Wales.
- Thales Australia noted that increased ship repair and maintenance services will be required as a result of Defence's investment in the naval fleet. Thales argued that its presence and recent investment in the Port of Newcastle, in conjunction with the longstanding Garden Island naval base, has helped New South Wales to position itself as a leader in maritime sustainment.¹⁰³

Evidence, Mr Chris Williams, Executive Chair, Sydney Aerospace and Defence Interest Group, 3 August 2017, p 34.

Evidence, Mr Jenkins, 3 August 2017, p 38.

Submission 28, Thales Australia, p 6.

- 3.11 Thales also advised that the future frigate and submarine programs will require smart system support. Decisions regarding the provision of smart system support have not been made. Thales called on the NSW Government to support its bid to provide the sonar solutions for the future submarine arguing that this would 'potentially secure for New South Wales a significant part of the once-in-a-generation investment in defence capability that is currently being made by the Commonwealth Government'. 104
- 3.12 Commodore Peter Scott, Director, Defence NSW, advised that decisions regarding where Defence locates itself are very important in securing the long-term growth of the local defence industry. He noted that while New South Wales will not decide where ships and submarines will be based, the government is in a good position to welcome their presence:

I think actual Australian Defence Force [ADF] presence on the ground is the fundamental long-term driver of associated defence industry ... [We] do have some opportunities coming up in the future where Defence will decide where ships and submarines will be based, for example, into the future. That is not an area where the New South Wales Government is in a position to direct or control but New South Wales is absolutely in a position to make defence and defence presence clearly welcome. ¹⁰⁵

- 3.13 Commodore Scott advised that New South Wales has 'very strong prospects for east coast basing of submarines in the future' and that there are 'very logical arguments' for doing so. 106
- 3.14 The Kembla and Newcastle Ports were suggested as being suitable options for the placement of naval assets on the east coast of New South Wales.
- 3.15 Regional Development Australia Illawarra argued that Port Kembla is located in a position of strategic advantage and that if offers a number of potential benefits:

The Illawarra region and the Port of Kembla are strategically positioned half way between both Canberra and Sydney and Nowra and Sydney. This proximity is a key strategic competitive advantage for Defence, should their East Coast presence grow in the long term... The Port of Kembla is an economic asset of national significance... Key advantages for Defence operations include:

- Deep water port, with fast access to continental shelf
- Advanced manufacturing with 24/7 maintenance in an industrial setting
- Ease of access and logistics connectivity
- Crew response times less than 30 minutes
- Housing affordability up to 30% cost saving on current Defence housing
- Access to highly skilled workforce and spousal employment opportunities
- Access to world-class education facilities and R&D capabilities.¹⁰⁷
- 3.16 HunterNet and the Hunter Business Chamber noted that the Australian Department of Defence has assessed the Garden Island naval base in Sydney as needing 'over \$700 million in

Submission 28, Thales Australia, p 5.

Evidence, Commodore Scott, Director, Defence NSW, NSW Department of Industry, 4 April 2018, p 4.

Evidence, Commodore Scott, 3 August 2017, p 10.

Submission 5, Regional Development Australia - Illawarra, pp 6-7.

works over the next 10 years to enable it to continue an expanded fleet'. The Port of Newcastle was identified as potential alternative for hosting a naval presence:

This raises the possibility that the projected constraints with Garden Island creates an opportunity for some naval fleet presence in Newcastle Harbour or new ship repair and maintenance facilities, which fits with Port of Newcastle's five year development plan and the planned development of the Carrington marine precinct.¹⁰⁸

3.17 Mr Matthew Ramage, Acting First Assistant Secretary Defence Industry Policy, Department of Defence, advised that decisions about submarine location are based on defence-capability. He urged the NSW Government to engage with key Defence decision makers, over a long period, in its efforts to have submarines based in New South Wales:

That is a defence capability-driven decision. The submarines do not start coming into service until the 2030s, so it is not an immediate decision. Defence will have to consider the future disposition of six of those 12 submarines. If I were the New South Wales Government, I would talk to Ministers and the senior people in Defence, whether it be the chief of the Royal Australian Navy or the secretary of the Department of Defence, to understand what is happening. However, I do not think it is necessarily something that can be influenced in one attempt now because it is a strategic decision and a big investment decision. Obviously talking to the right people at the senior level is the best way to go about it.¹⁰⁹

- 3.18 RDA Illawarra suggested a number or practical steps that the government could take to support future submarines being based on the New South Wales east coast. Initiatives included the:
 - development of a statement of intent which would 'advise' the Australian Government that the NSW Government intends to identify potential future submarine base options in New South Wales
 - establishment of a working group that would assist New South Wales in understanding future submarine base needs and identify potential submarine site locations. 110

Committee comment

- 3.19 The committee acknowledges that decisions regarding the location of Defence assets will be based on defence capability needs. It is encouraging to note that New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017 (The NSW Government Defence and Industry Strategy) has identified the state's areas of strength. The committee also notes that the NSW Government Defence and Industry Strategy includes a number of initiatives that seek to demonstrate how these strengths align with Defence's capability needs.
- 3.20 Decisions regarding where Defence locates its assets are very important in securing the long-term growth of the local defence industry. The committee therefore urges the NSW Government to be proactive in engaging with Defence decision makers in its attempts to have Defence assets located within New South Wales.

Submission 25, Hunter Business Chamber and HunterNet, p 11.

Evidence, Mr Matthew Ramage, Acting First Assistant Secretary, Defence Industry Policy, Department of Defence, 3 August 2017, p 20.

Submission 5a, Regional Development Australia - Illawarra, p 4.

3.21 The committee notes the potential opportunities for New South Wales provided by the Naval Shipbuilding Program and believes that the state is well placed to provide a range of maritime sustainment and support services. The committee strongly encourages the NSW Government to work with prime contractors in identifying and bidding for Defence sustainment and support contracts.

Increasing the accessibility of defence markets

- 3.22 The Australian defence industry employs around 25,000 people nationally. Prime contractors account for around 50 per cent of employment in the industry. Over 3000 small to medium enterprises (SMEs) operate in the Australian defence industry, mostly as subcontractors to prime companies.¹¹¹
- 3.23 The committee met a number of innovative and highly capable New South Wales SMEs which support Australian or international defence force needs. Representatives from industry reported a number of common challenges including the complexity of procurement processes, the visibility of procurement opportunities, and difficulties in accessing the finance necessary to deliver defence contracts.
- 3.24 This section discusses these challenges and sets out a number of current supports available to the New South Wales defence industry.

Defence procurement

- 3.25 Defence is the largest agency in the Commonwealth and is responsible for some of Australia's most complex procurements. These procurement activities are driven by the capability needs of the Australian Defence Force. Australian Government procurements are underpinned by legislation and policy that seeks to achieve a value for money outcome for the tax payer. 112
- 3.26 The Australian Government's Department of Defence's Capability Acquisition and Sustainment Group (CASG) is responsible for purchasing and maintaining military equipment and supplies for the Australian Defence Force. CASG seeks to implement a 'smart buyer' model which is 'reliant on an enhanced relationship with industry'. This enables CASG to focus on the management, planning and governance of procurement activities whilst leaving the industry to focus on execution of the capability requirements.¹¹³
- 3.27 The majority of Defence contracts for major acquisitions are with global, prime contractors who own the intellectual property of the capabilities purchased by Defence. While a limited number of direct opportunities to contract with Defence exist for SMEs, a significant number of opportunities exist to work within the supply chains of these prime contractors. 114

Australian Government Defence of Defence, 2016 Defence Industry Policy Statement, p 6.

Australian Government Department of Defence, *Procurement and Contracting in Defence*, www.defence.gov.au/casg/DoingBusiness/ProcurementDefence/.

Australian Government Department of Defence, About CASG Who are we?, http://www.defence.gov.au/casg/AboutCASG/WhoWeAre/default.aspx.

¹¹⁴ Centre for Defence Industry Capability, *New to Defence*, https://www.business.gov.au/Centre-for-Defence-Industry-Capability/New-to-Defence.

- 3.28 The Australian Department of Defence's Australian Industry Capability (AIC) Program is a major driver of Australian industry involvement in delivering Defence capability. The AIC Program requires that tenderers for projects in excess of \$20 million to demonstrate how they will engage and involve Australian industry during the course of a project. AIC Program plans submitted by potential contractors form an important part of Defence's procurement evaluation process. ¹¹⁵
- 3.29 Advice from the Australian Government recommends that industry should closely monitor public AIC plans published on the Defence website, as they provide 'a valuable resource for businesses wishing to identify, and understand and engage with defence prime contractors'. These plans also 'provide a specific point of contact in the prime contractor's organisation to discuss business opportunities associated with that contract'. 116

Centre for Defence Industry Capability

- 3.30 The Centre for Defence Industry Capability (CDIC) is responsible for advising Australian defence industry to support growth and innovation. The CDIC is the single entry point for Australian industry to Defence and is a 'critical asset for state-based industry seeking to position to support Defence's current and future needs'. 117
- 3.31 The CDIC has an office in Sydney with dedicated advisors available to work with New South Wales based industry, government representatives and industry groups. 118
- 3.32 Mr Trent Goldsack, Business Advisor for the CDIC, advised that the centre delivers a range of services including 'advisory and facilitation services to defence sector small to medium enterprises to improve business management skills, development, innovation and access to export initiatives and international and domestic supply chains'. 119
- 3.33 The CDIC also supports 'new entrants into the defence industry offering specific facilitation for defence market preparedness and a road map to further defence industry involvement and services to assist defence industry, SMEs to upskill their workforce'. 120
- 3.34 Mr Goldsack advised that the CDIC's advisory and facilitation teams work 'collectively ... with Defence, defence projects, prime contractors, research institutions and Commonwealth, State and Territory agencies' to build 'a network of knowledge and relationships that facilitates the relationships between industry and defence'. 121
- 3.35 The Australian Government's Department of Defence advised that New South Wales based companies are increasing their engagement with the CDIC. The department also encouraged

Submission 32, Department of Defence, p 6.

Australian Government, AIC Program and Public AIC plans, http://www.business.gov.au/Centre-for-Defence-Industry-Capability/About-the-CDIC/AIC-program-and-AIC-plans

Submission 32, Department of Defence -Australian Government, p 10.

Evidence, Mr Trent Goldsack, Business Advisor, Centre for Defence Industry Capability, 4 April 2018, p 3.

Evidence, Mr Goldsack, 4 April 2018, p 3.

Evidence, Mr Goldsack, 4 April 2018, p 3.

Evidence, Mr Goldsack, 4 April 2018, p 4.

the industry and the NSW Government to take advantage of the opportunities provided by CDIC programs. 122

Assisting SMEs identify defence market opportunities

A common challenge for SMEs is identifying domestic and international defence opportunities. For example, Mr Tony Green, Executive Officer, i3net, a network of innovative industry based in the Illawarra region, stated that small business needed support in the facilitation of relationships with procuring entities. Mr Green acknowledged the role of the CDIC and Defence NSW in this regard but suggested that further work was required to strengthen relationships between relevant organisations and regional stakeholders:

What we probably need assistance with...[is] understanding which doors to knock on and who to go and talk to. Two organisations that are being developed – from a State level, Defence NSW; and from a Federal level, the Centre for Defence Industry Capability – have what we see as a critical need to have good connections with the Illawarra. That is the sort of sort infrastructure we need help from. We need those organisations working more closely with us to say "From our understanding and from our audits, these are some of the capabilities companies are looking for". You have that capability here in the region. These are the sorts of people you need to talk to and these are the sorts of things you need to bring those opportunities to the Illawarra. 123

3.37 This position was echoed by Mr Laurie Koster, Chairman of the Shoalhaven Defence Industry Group. He emphasised the benefits of trade shows and exhibitions for small businesses in building networks and generating opportunities:

One of the crowning glories of what New South Wales has done over the last 10 years is getting back into being involved in the trade shows. That makes a big difference. It makes a difference to the people who are exhibiting on the trade show, because some of them would never be able to get to the trade show without being on the New South Wales stand. It also allows a focal point where people with some influence within the Defence organisation can come and see the widget that you are trying to sell. No Prime Minister or general is ever going to make the decision, but he or she can direct their staff to go and have a look at that. Once you get that bit done, it becomes far easier, because you now have a name to go and talk to. With New South Wales pushing that, it is really good. 124

3.38 A number of commonwealth and state programs exist to support SMEs in marketing their products to the defence marketplace. For example, the Team Defence Australia initiative is a series of events which 'provide export-ready companies with access to new or existing markets and international supply chains'. Events are organised by the recently established 'Australian Defence Export Office in conjunction with the CDIC and Austrade, and coordinated with state and territory governments'. 125

Submission 32, Department of Defence - Australian Government, pp 9-10.

Evidence, Mr Tony Green, Executive Officer, i3net, 29 June 2017, p 15.

Evidence, Mr Laurie Koster, Chairman, Shoalhaven Defence Industry Group, 29 June 2017, p 14.

Australian Government Business, Team Defence Australia (27 April 2018) https://www.business.gov.au/centre-for-defence-industry-capability/international-support-and-exports/team-defence-australia.

- 3.39 Mr Matthew Ramage, Acting First Assistant Secretary Defence Industry, Department of Defence, explained that the Team Defence Australia program is successful because 'companies themselves do not necessarily have the ability to go overseas and market themselves into the big primes and the big opportunities overseas'. Therefore subsidising support for appropriate businesses is an important mechanism in opening up opportunities. 126
- 3.40 The NSW Government has outlined its commitment to work closely with the CDIC, as well as industry networks, to leverage federal industry support programs such as Team Defence Australia and the Global Supply Chain initiative under its objective to sustain and grow existing and new defence industry activity across regional NSW.¹²⁷
- 3.41 In addition to engaging with commonwealth initiatives, the NSW Government has also recently taken steps to support SMEs access markets. Mr Duncan Challen, Executive Director, Industry Development, Department of Industry acknowledged that ongoing support for SMEs in identifying opportunities was important:

A big focus is helping SMEs understand what the opportunities are. I think that there are a lot of them that do not realise that some of the activities and technologies that they have could be applicable within the defence industries space. That is one of the things we [NSW Government] need to help them with. We need to help them understand what the global supply chains are, the channels into building deeper relationships with the big prime contractors as well. I think that we can help them understand the difference between how prime contractors work and what they look for from an SME.¹²⁸

3.42 Mr Challen advised that the government has also been active in sponsoring defence conferences, expos and industry roadshows:

The NSW Government was also the platinum sponsor in August of the HunterNet Defence Conference and the principal sponsor at Pacific 2017 in October. At Pacific 2017 we exhibited, along with industry networks and 14 small and medium sized enterprises [SMEs], to promote our specialist regional capabilities.¹²⁹

- 3.43 Orange City Council commented that the NSW Government has historically been generous with offering assistance to SMEs to attend trade shows and expos. The council urged government staff to attend trade shows and the like as it would put them in a better position to market the benefits to those businesses they are encouraging to attend.¹³⁰
- 3.44 The Shoalhaven City Council also encouraged the government to continue facilitating SME attendance at trade shows and expos.¹³¹

Correspondence, from Mr Matthew Ramage, Acting First Assistant Secretary, Defence Industry Policy, Department of Defence, to Chair, 21 August 2017.

NSW Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 14.

Evidence, Mr Duncan Challen, Executive Director, Industry Development, NSW Department of Industry, 3 August 2017, p 10.

Evidence, Mr Challen, 4 April 2018, p 2.

Submission 13a, Orange City Council, p 13.

Submission 19a, Shoalhaven City Council, p 8.

Case Study - supporting SMEs to access domestic and international markets, Carbonix 132

Carbonix is a small company of around 10 people which builds unmanned aircraft systems. The company has developed a product called a VTOL, or vertical take-off and landing, which cruises into horizontal once it has reached a certain height. The committee spoke with the company's Executive General Manager, Mr Jeff Eager who explained:

'We are very small in the sense that we are emerging in this space. We evolved out of marine, hence the location at Cockatoo Island...We are domestic focused ... but export as well. We have a lot of interest from offshore.'

'I think on the surface the government has been very supportive so far. We have had involvement in a couple of major exhibitions in the land forces. We were invited to join the State booth...as well as the Avalon Air Show. Those two events gave us great exposure at an affordable rate where we could participate otherwise we could not have.'

Mr Eager further advised that another issue to consider was inter-governmental communication: 'government-to-government communication can introduce a small company and can take us into places where we could wave our arms for a long time and never be seen. Those sorts of delegations, introductions and associations with government will certainly help us.' ¹³³

Supporting SMEs to become 'defence ready'

- 3.45 Some inquiry participants acknowledged the complexities associated with supplying goods and services to Defence. This was seen as a particular challenge for those businesses seeking to enter the industry for the first time, or for those who may currently work in alternative sectors with transferable skill sets. The need for businesses to be 'defence ready' was emphasised by a number of SMEs.
- 3.46 For example, Mr Green, Chief Executive, i3net, explained that there are number intricacies in supplying Defence. He noted that Defence requirements can be high and urged governments to be active in helping SMEs understand these requirements:

For us it is about the intricacies of supplying to Defence. The requirements of Defence are that bit higher ... so it is about making sure that they are aware of that and making sure that we can demonstrate that they can fit that bill. That comes down to those organisations – Defence NSW and the Centre for Defence Industry Capability...We need to make sure they work very closely with regions like ours.¹³⁴

Access to finance

3.47 Access to finance, particularly for smaller SMEs or those seeking to break into the defence market, was identified as a significant barrier. Inquiry participants reported a reluctance of certain banks in lending to SMEs for defence related purposes. It was suggested that this could be due to banks having a limited understanding of the defence procurement environment and

Evidence, Mr Jeff Eager, Executive General Manager, Carbonix, 3 August 2017, p 7.

Evidence, Mr Eager, 3 August 2017, pp 6-7.

Evidence, Mr Green, 29 June 2017, p 16.

the intricacies of defence contracts. This made it difficult for SMEs to secure the necessary funding to deliver larger, more valuable contracts.

3.48 The Shoalhaven Defence Industry Group advised that regional banks have a better understanding of industries such as agriculture when compared to defence. A consequence of this is that the banks are seemingly unwilling to provide regional SMEs with the credit required to get Defence projects off the ground:

In the main, regional areas such as the Shoalhaven have banking facilities more attuned to the requirements of agriculture and small(er) local/consumer based businesses... The model quickly falls apart when dealing in defence. The concepts, the time and the products are outside the comfort level of the "local" banks. Regional branches do not understand defence or its project structure. This makes it exceptionally difficult for defence related businesses, especially SMEs, to secure funding for larger multi-million dollar projects where the family home, business premises and cash reserves do not meet the required collateral.¹³⁵

3.49 Mr Steve Bowden, Director of Spearpoint Solutions, an SME based in Queanbeyan, identified similar concerns regarding cash flow and access to financing. ¹³⁶ Mr Bowden explained that limited access to financing was restricting expansion opportunities for the business:

We intend to expand, but our major problem is cash flow. As a small company with very little equity, generally speaking the banks do not want to know us. We cycle a lot of our resources into stock that we can hold and distribute to our customers but because of the nature of our business—that is, defence-related—the banks just do not care. Stock has no meaning to them because they cannot resell it because it is so specialised...An increase in stock of a particular type of product line, and then to expand the support services and the construction-type activities that are associated with that product, will allow us to take it to a broader audience than just Defence, such as local councils and other government and State agencies. It has been very frustrating to run a \$5 million to \$7 million company with a \$50,000 overdraft. That is all the access to cash reserves that we can get.¹³⁷

3.50 To provide for greater access to finance, the Shoalhaven Defence Industry Group called for the establishment of an independent body with a comprehensive understanding of Defence, which could 'review and vouch for the capability of the company and assist the company in obtaining credit'. 138

Committee comment

3.51 It is clear that initiatives which facilitate and enhance relationships between small and medium-sized enterprises, primes and procuring entities are essential to supporting defence industry growth. The committee believes that participation in trade shows and expos is of particular benefit to small and medium-sized enterprises as it helps them to market their products to potential domestic and international buyers. We are encouraged by the support offered by the

Submission 12, Shoalhaven Defence Industry Group, p 3.

Evidence, Mr Steve Bowden, Director, Spearpoint Solutions, 24 October 2017, p 12.

Evidence, Mr Bowden, 24 October 2017, p 12.

Submission 12, Shoalhaven Industry Group, p 4.

NSW Government to small and medium-sized enterprises to help them attend trade shows and expos.

3.52 It is recommended that NSW Government continues to invest in providing New South Wales based small and medium-sized enterprises with marketing and networking opportunities, so that they may better engage with primes and take advantage of potential domestic and international market opportunities.

Recommendation 6

That the NSW Government continues to invest in providing New South Wales based small and medium-sized enterprises with marketing and networking opportunities, so that they may better engage with primes and take advantage of potential domestic and international market opportunities.

3.53 The committee supports Australian Government initiatives such as the Team Defence Australia program and the Centre for Defence Industry Capability. The committee notes the promptings of Australian Government representatives for Defence NSW and New South Wales based small and medium-sized enterprises to take advantage of commonwealth funded programs. It is recommended that Defence NSW work with the Centre for Defence Industry Capability and other relevant stakeholders to ensure that commonwealth funded defence support opportunities are comprehensively utilised by New South Wales based industry.

Recommendation 7

That Defence NSW work with the Centre for Defence Industry Capability and other relevant stakeholders to ensure that commonwealth funded defence support opportunities are comprehensively utilised by New South Wales based industry.

Enhancing industry capability, visibility and involvement in Defence projects

- 3.54 As noted above the Australian Industry Capability Program is a major driver of Australian industry involvement in delivering Defence capability. 139
- 3.55 Another significant initiative is the Defence Industrial Capability Plan, released on 23 April 2018. The plan outlines the Australian Government's 'long-term vision to build and develop a robust, resilient and internationally competitive Australian defence industry base that is better able to help meet defence capability requirements'. 140
- 3.56 Inquiry participants called for an increased visibility of industry capability across the state of New South Wales. It was suggested that this would deliver a number of benefits. This includes

Submission 32, Department of Defence – Australian Government, p 6.

Australian Government Department of Defence, *Defence Industrial Capability Plan*, http://www.defence.gov.au/SPI/Industry/CapabilityPlan/.

enhanced ability for relevant parties to match local industry capability to the supply needs of prime contractors, and other relevant bodies.

The Australian Government Defence Industrial Capability Plan

- 3.57 The Defence Industrial Capability Plan provides a roadmap for Australia's defence industry to 'achieve an Australian defence industry that has the capability, posture and resilience to help meet Australia's defence needs' by 2028. 141
- 3.58 Within the Defence Industrial Capability Plan is the Sovereign Industrial Capability Priorities, which 'are industrial capabilities critical to achieving the Australian Defence Force's operational mission and to the development of our future force over the next few years'. The initial Sovereign Industrial Capability Priorities are:
 - Collins Class Submarine maintenance and technology upgrade
 - Continuous Shipbuilding Program (including rolling submarine acquisition)
 - Land Combat Vehicle and technology upgrade
 - Enhanced Active and Passive Phased Array Radar Capability
 - combat clothing survivability and signature reduction technologies
 - advanced signal processing capability in Electronic Warfare, Cyber and Information Security, and Signature Management technologies and operations
 - surveillance and intelligence data collection, analysis, dissemination and complex systems integration
 - test, evaluation, certification and systems assurance
 - munitions and small arms research, design, development and manufacture
 - aerospace platform deep maintenance.¹⁴³
- 3.59 Commodore Scott reflected on the importance of the Defence Industrial Capability Plan and advised that it will be useful in guiding future defence industry activities in New South Wales:

I think that [the Defence Industrial Capability Plan] will be very important for shaping our efforts in the future. It will tell us the sovereign industry capabilities that Defence believes it needs. That will help everyone involved in the defence industry to sharpen up on where they focus. I think there will be many of those sovereign capabilities where we can see capabilities already resident, even if they are dispersed geographically or organisationally in New South Wales...I think that is going to be a very important policy.¹⁴⁴

Australian Government Department of Defence, Fact Sheet: Defence Industrial Capability Plan, http://www.defence.gov.au/SPI/Industry/CapabilityPlan/Docs/DICP-Factsheet1.PDF.

Media release, Hon Christopher Pyne MP, Minister for Defence Industry, 'Defence Industrial Capability Plan', 23 April 2018.

Media release, Hon Christopher Pyne MP, Minister for Defence Industry, 'Defence Industrial Capability Plan', 23 April 2018.

Evidence, Commodore Scott, 4 April 2018, p 12.

Support for a New South Wales Defence Capability Directory

- 3.60 The discussion paper noted the Australian Capital Territory's (ACT) development of a Defence Industry Capability Directory to match capability requirements with relevant defence businesses as a model for New South Wales to enhance the visibility of its industry capability.¹⁴⁵
- 3.61 Ms Kate Lundy, ACT Defence Advocate explained that the ACT directory acts as a 'compendium of capability' for the broader ACT region, presenting capabilities and contact details for defence related businesses and other organisations such as educational establishments and other government agencies. 146
- 3.62 There was support among inquiry participants for the development of a similar New South Wales defence capability directory based on the ACT model. For example, Orange City Council posited that 'a directory certainly would be a useful tool' provided it was kept current. The council advised that those not currently in the industry but with potential to join may not understand what skills, abilities and capability they hold that is readily transferrable to such a directory. Also
- 3.63 Regional Development Australia Sydney expressed the view that a 'readily available and easily accessible' directory would be 'very useful to have' as it would satisfy the critical need for 'upto-date information on companies and their capabilities'. 149
- 3.64 Regional Development Australia Sydney also noted that for a capability directory to have integrity and be used for 'linking companies to opportunities for tenders', it would need to 'incorporate activities and data sourced from the Centre for Defence Industry Capability and the Industry Capability Network.¹⁵⁰
- 3.65 The Australian Industry Group NSW explained that a directory would 'assist Primes to source more local suppliers and also assist second tier and third tier players to identify potential partners for contracts or joint venture partners'. 151

Understanding New South Wales capabilities - Advanced Navigation¹⁵²

Advanced Navigation is a high tech company specialising in navigation technology. Their products can be installed on drones, armed vehicles, or submarines. Mr Chris Shaw, a founding director of the business, explained: 'We tell our customers, there is nothing that we can't track'. Its customer base

Standing Committee on State Development, NSW Legislative Council, Discussion paper: Defence industry in New South Wales (2017), p 25; Evidence, Ms Kate Lundy, ACT Defence Advocate, 3 August 2017, p 25.

Evidence, Ms Lundy, 3 August 2017, p 25.

Standing Committee on State Development, NSW Legislative Council, *Discussion paper: Defence industry in New South Wales* (2017), p 26.

Supplementary submission 13a, Orange City Council, p 7.

Supplementary submission 6a, Regional Development Australia – Sydney, p 5.

Supplementary submission 6a, Regional Development Australia – Sydney, p 5.

Submission 40, Australian Industry Group NSW, p6.

Evidence, Mr Chris Shaw, Director, Advanced Navigation, 3 August 2017, pp 7-8.

includes many of the major global primes including Lockheed Martin, Boeing, and Thales, however little is known about the business in Australia.

'Our approach is probably different from that of other SMEs. We have gone offshore and conquered the global arena first. We are very successful in the United States and in Europe, and we are also emerging in the Asia-Pacific area'.

'One of the challenges we sometimes face is finding customers for our products. The most common response we get from our customers is that they have never heard of us. We get a lot of that, even here in New South Wales. Just last week we had a meeting with a New South Wales company with whom we will probably do a lot of business. They said that they did not know we existed and they were buying technology from the Canadians to do what we do...'

3.66 The Australian Industry Group advised that if New South Wales were to establish a defence capability directory it would be 'beneficial' if it had an index or online facility attached to search by capability rather than company name like the ACT directory:

The ACT directory is fine if you know the company name you are after but more usually a company will be seeking products or capabilities. An index in the directory or an online facility attaching, which allows searching by capability would be more beneficial.¹⁵³

3.67 Shoalhaven City Council argued that the development of a directory should be 'just one small part of an overall strategy to raise the profile of NSW and Defence support capabilities'. The council argued that 'networking is a far more beneficial method to garner information on capabilities and to encourage collaborations between businesses that meet the needs of our Defence force'. 154

Understanding the defence industry capabilities of New South Wales

- 3.68 The discussion paper sought to identify what steps the NSW Government could take to better understand defence industry capabilities in New South Wales, as well as the role Defence NSW should have in building connections between local industry and primes.¹⁵⁵
- 3.69 Mr Williams, Sydney Aerospace and Defence Industry Group noted the importance of connecting local capabilities with the needs of primes. Reflecting on recent efforts by industry associations to compile an overview of capability for the Naval Group (Australia's international design partner for the Future Submarine program), Mr Williams called for further support and collaboration with regional associations and state government departments to develop a comprehensive and coherent picture of New South Wales defence industry capability. 156
- 3.70 Mr Mark Goodsell, Head of the NSW branch of Australian Industry Group claimed it was important for the NSW Government to understand what it already has in terms of defence industry capabilities in order to meet the defence industry objectives set for the next 20 years:

Submission 40, Australian Industry Group NSW, p 6.

Supplementary submission 19a, Shoalhaven City Council, p 5.

Standing Committee on State Development, NSW Legislative Council, *Discussion paper: Defence industry in New South Wales* (2017), p 26.

Evidence, Mr Williams, 3 August 2017, p 29.

I think at a policy level we struggle with how you formalise that kind of what is often just serendipitous connection, but it does not mean it is not worth trying. So I think the thing for the State Government is to understand the existing mechanisms it has got, the existing mapping and the existing points of leverage it has already got into industry, whether it is through the ICN or it is through other government programs, through the big purchasing agencies outside the fence who already buy things off some of these companies, and try to collate that information.¹⁵⁷

- 3.71 The Australian Industry Group argued that for the government to market the capabilities of New South Wales it was essential that an audit of supplier capabilities be conducted to identity regional strengths. This would assist the government to 'more accurately ... direct inquirers to the most appropriate source(s0 for their needs'. 158
- 3.72 Shoalhaven City Council suggested that Defence NSW could undertake the role of 'building connections between local industry and primes' to enhance the visibility of the state's capabilities. The council was of the view that for Defence NSW to be fully aware of the state's capabilities, it was 'necessary that Defence NSW staff be located where the businesses are that is in regional NSW'. 160
- 3.73 In the Hunter, such connection building is already taking place with the Australian Industry Group partnering with Defence NSW to 'introduce Primes to SMEs at supplier breakfast meetings'. The Australian Industry Group stated this was a 'low-cost way of imparting information directly between potential business partners', with defence-ready SMEs gaining work very quickly after these meetings. ¹⁶¹
- 3.74 Hunter Defence was of the view that Defence NSW should develop a state and regional based capability matrix so as to be aware of small to medium enterprise (SMEs) capabilities to 'access domestic and export defence contract/opportunities'. 162
- 3.75 Orange City Council suggested that Defence NSW should employ industry engagement specialists to act as information conduits between businesses and the defence industry, and other appropriate regional staff and bodies, to identify potential businesses to operate with the defence industry. 163
- 3.76 Orange City Council also called on Defence NSW to be a 'lobbying force to ensure the state attracts as much business as possible from the prime contractors'. In order to attract business, Defence NSW could coordinate contractors on behalf of the prime, or provide 'financial or other incentives to attract the prime for the purposes of delivering the contract within NSW'. 164

Evidence, Mr Mark Goodsell, Head - New South Wales, Australian Industry Group, 4 April 2018, p 21.

Submission 40, Australian Industry Group NSW, p 5.

Supplementary submission 19a, Shoalhaven City Council, p 5.

Supplementary submission 19a, Shoalhaven City Council, p 5.

Submission 40, Australian Industry Group NSW, p6.

Supplementary submission 25a, Hunter Business Chamber, p 8.

Supplementary submission 13a, Orange City Council, p 7.

Supplementary submission 13a, Orange City Council, p 7.

Access to effective telecommunication networks

- 3.77 A number of inquiry participants reflected on the importance of governments in providing the necessary enabling infrastructure to support and grow local business. Access to the National Broadband Network (NBN) was identified as one such critical enabler.
- 3.78 The committee heard repeated references that failure to connect to the NBN was frustrating business. For example, speaking to the committee on its site visit to Williamtown, Mr Ryan Stephenson, Managing Director of Bohemia Interactive Solutions, identified potential constraints placed on business growth opportunity as a result of limited access to the NBN. 165
- 3.79 The issue of access to telecommunication networks has relevance to all regional business and was discussed by numerous participants of the Standing Committee on State Development's inquiry into the Regional development and a global Sydney, which was conducted concurrently with the Defence industry in New South Wales inquiry.
- 3.80 The committee's report into Regional development and a global Sydney, dated June 2018, recommended that the NSW Government immediately engage in a high level strategic dialogue with all three levels of government and NBN Co. to establish a working group to discuss the NBN rollout. This would focus on the strategic priorities for the New South Wales rollout, the speed of the rollout, and explore the practicalities of a national broadband network service guarantee. 166

Committee comment

- 3.81 The committee notes the release of the Australian Government's Defence Industrial Capability Plan and its objectives of providing a long-term vision to build and develop an Australian defence industry base that is better able to meet defence capability requirements.
- 3.82 The committee acknowledges the support of inquiry participants for a New South Wales defence industry capability directory with the objective being to match capability requirements with relevant defence businesses in an accessible format. The committee notes that resources will be required in maintaining an up-to-date directory. However, the committee believes that a Defence Industry Capability Directory would be an important tool in enhancing the visibility of the state's defence industry capability. It is recommended that the NSW Government develop a New South Wales Defence Industry Capability Directory.

Recommendation 8

That the NSW Government develop a New South Wales Defence Industry Capability Directory.

Standing Committee on State Development, NSW Legislative Council, *Discussion Paper: Defence Industry in NSW* (2017), p. 48.

Standing Committee on State Development, NSW Legislative Council, Regional development and a global Sydney, (June 2018) p 77.

3.83 The committee acknowledges the importance to local and regional defence business of having access to reliable, sustainable and affordable telecommunication networks such as the National Broadband Network. The committee therefore reiterates its recommendation outlined within its 2018 report into Regional development and a global Sydney which urges the NSW Government to immediately engage in a high level strategic dialogue with all three levels of government and NBN Co. to establish a working group to discuss the NBN rollout. This would focus on the strategic priorities for the New South Wales rollout, the speed of the rollout, and explore the practicalities of a national broadband network service guarantee.

Developing the future workforce

- 3.84 New South Wales has the largest number of defence-related skilled workers of all the states and territories and displays considerable expertise in areas relevant to defence including 'engineering, ICT, manufacturing and systems integration, including aerospace'. 167
- 3.85 Despite the state's leading position, industry and academic representatives frequently emphasised the need for the NSW Government to do more in supporting the defence industry secure a sustainable, skilled workforce into the future.
- 3.86 This section discusses key initiatives identified by stakeholders to help develop the defence workforce. Initiatives include measures to promote Science, Technology, Engineering and Mathematics (STEM) subjects, and providing better access to education and training opportunities that meet defence industry needs.

Declining participation in STEM subjects

3.87 Inquiry participants acknowledged that declining student participation rates in STEM subjects are hindering the development of the technically skilled workforce. According to Engineers Australia such trends are 'entrenched' across academia:

Building a technical workforce of the future is undermined by entrenched trends in school studies away from vital enabling subjects. Nationally less than 10 per cent of year 12 students study advanced maths, less than 20 per cent study intermediate maths, about 14 per cent study physics and under 18 per cent study chemistry. ¹⁶⁸

- 3.88 A study conducted by the NSW Parliamentary Research Service found that 'since 1995, Australia STEM school performance has generally declined; both in absolute terms and relative to comparable nations'. 169
- **3.89** In a report entitled "Engineers make it happen", Engineers Australia found that only Tasmania and the Northern Territory have lower high school retention rates than New South Wales. ¹⁷⁰ A

Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 13.

Submission 24, Engineers Australia, p 4.

NSW Parliamentary Research Service, STEM Education in NSW Schools, September 2017, p 1.

Evidence, Mr Greg Ewing, Managing Director, Engineers Australia—Sydney and Canberra Divisions, 19 June 2017, pp 45-46. (Standing Committee on State Development inquiry into regional development and a Global Sydney).

consequence of this is that there less opportunity for New South Wales students to study STEM subjects.

3.90 The Australian Industry Group commented that the decline of STEM subjects may be attributable to society not sufficiently valuing careers that require a background in STEM: 'the community expectation here contrasts with, say, Germany where there is still a strong apprenticeship career structure and engineers have a higher social standing than doctors'. ¹⁷¹

The need to address the STEM shortfall

- **3.91** For industry representatives, the potential shortfall in a skilled, technical workforce, was one of the most concerning issues facing the industry.
- 3.92 According to the Australian Industry Group there is a level of community ignorance about STEM's importance to the workforce and providing students with the means to secure employment in the future:

There is some community ignorance of the importance of STEM and technology careers. It has now been acknowledged that 70% of future jobs will require STEM skills. Unlike in earlier generations, STEM is not optional, it is mandatory for well paying and secure employment.¹⁷²

3.93 Mr Chris Jenkins, Chief Executive Officer, Thales Australia, expressed concern regarding a potential shortfall of students and graduates with STEM skills. To address this issue, Mr Jenkins emphasised the need to increase the profile and visibility of science and engineering subjects:

I think the biggest thing that is going to negatively affect our sector and the State as a consequence and all of Australasia is the STEM shortfall coming through schools—science, technology, engineering, maths. ¹⁷³

3.94 Speaking to the issue of the perceived STEM shortfall, Mr Duncan Challen, NSW Department of Industry, acknowledged that businesses will locate themselves in areas that have the requisite skills for their needs. He observed that the government was aware of this and indicated that it was working through various channels to facilitate the production of skilled graduates that meet industry requirements:

... [W]hen you talk to any international business or businesses they will establish themselves where the skills are. That is the number one priority. If you do not have the skills it does not matter what else you offer and you throw at them. It really is fundamental around the skills. We need to make sure that we are looking to the future in terms of the skill sets that we need...What could be a key issue for us is that we do not have the right skills for the work that needs to be done around defence industries. We are focused on driving, in terms of Defence NSW and the Department of Industry, STEM and we are doing a lot in that regard. We are working closely with the TAFE department to make sure we have the right curriculum in place and working with

Submission 40, Australian Industry Group NSW, p7.

Submission 40, Australian Industry Group NSW, p7.

Evidence, Mr Jenkins, 3 August 2017, p 43.

universities to make sure that we are getting graduates out there that can find the right types of job that are both highly paid and highly skilled.¹⁷⁴

Female participation in STEM

- 3.95 Some stakeholders expressed concerns about a lack of female representation in STEM subjects.
- 3.96 For example, Engineers Australia contended that, 'at present, the majority of year 12 students, nationally, are young women, but their participation in maths and science subjects is especially low'. Engineers Australia advised that only '6.5 per cent of young women study year 12 physics and advanced maths' and this was adding to problems created by 'entrenched trends in school studies away from vital enabling subjects'. 175
- 3.97 According to Engineers Australia this trend 'reflects unfortunate and unacceptable attitudinal legacies and the failure of governments to adequately invest in teachers and the teaching of science and maths in Australia's schools'. 176
- 3.98 The NSW Government also noted the under-representation of females in defence industries. Mr Duncan Challen, Executive Director, NSW Department of Industry, suggested that targeted support was required to address this imbalance.¹⁷⁷

Promoting STEM

3.99 According to the Australian Industry Group, support for improving STEM participation rates and creating better connections between schools and industry must come from within senior levels of government:

Any initiatives for improving STEM outcomes in schools and outreaching to industry must be driven at ministerial level. Without that level of leadership, drive and accountability, little will change. 178

3.100 The NSW Government Defence and Industry Strategy has identified promotion of STEM as a key component of its objective to provide defence and industry with their future workforce (Strategy item number 3). The Strategy states:

NSW: Strong, smart and connected commits the NSW Government to promoting defence industry career pathways and encouraging and developing educational opportunities and incentives to stimulate the uptake of science, technology, engineering and mathematics (STEM) subjects at schools and the transfer of STEM-skilled employees to NSW.¹⁷⁹

3.101 The NSW Government Defence and Industry Strategy states that STEM will be prioritised through promoting increased 'interest and accessibility of STEM in NSW's secondary and

Evidence, Mr Challen, 4 April 2018, p 14.

Submission 24, Engineers Australia, p 4.

Submission 24, Engineers Australia, p 4.

Evidence, Mr Challen, 3 August 2017, p 12.

Submission 40, Australian Industry Group NSW, p 6.

Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 13.

tertiary institutions' and 'careers paths in defence industry and technology through industry partnerships and incentive programs'. 180

3.102 One initiative of the government was the Defence Pitch @ Parliament coordinated by the Department of Industry. It set-up approximately 150 university students doing their masters or doctorates with 20 defence companies at Parliament House. The students were given the opportunity to meet with senior defence company figures and pitch an idea. Mr Challen, Department of Industry advised that the day was a success because it made students aware of the exciting career opportunities in the defence industry and indicated that the day would be repeated in regional areas:

[It] was invaluable because we had kids there who would not have had access to those types of people in those companies. The feedback that we had was, "I didn't realise what a Northrop, Lockheed or Boeing could do, and how exciting that sector is." Stuff that Chris and Jeff are doing is exciting stuff. We are going to do that in the regions as well. We are going to go into the regions so that university students can understand what the opportunities are in the defence space. 181

- 3.103 The promotion of STEM is also being pursued through industry-based initiatives such as the ME Program and the 2016 Greater Hunter Makers Festival.
- 3.104 The ME Program was established in 2010 by the Hunter branch of Regional Development Australia and is supported by over 50 businesses including BAE Systems Australia, Bohemia Interactive Solutions, Lockheed Martin, and Thales. The program aims to equip 'students with the skills and knowledge that will prepare them for 21st century STEM careers.' This is achieved via establishing collaborative projects between local schools and STEM industries, giving primary and secondary school students practical industry experiences, increasing their awareness of career opportunities in STEM fields. The Hunter branch of Regional Development Australia and is supported by over 50 businesses including BAE Systems Australia, Bohemia Interactive Solutions, Lockheed Martin, and Thales. The program aims to equip 'students with the skills and knowledge that will prepare them for 21st century STEM careers.' This is achieved via establishing collaborative projects between local schools and STEM industries, giving primary and secondary school students practical industry experiences, increasing their awareness of career opportunities in STEM fields.
- **3.105** The Hunter Business Chamber advised that the ME program has been highly successful and has achieved the following outcomes:
 - more than 25,000 students have been provided with industry based experiences
 - student participation in STEM subjects has been boosted by 19.2 per cent since its inception in 2010
 - participating schools have worked closely with local industries to develop the enterprise skill sets which are required in order to pursue careers in the STEM based industries and Defence
 - the exposure of increasing numbers of students to defence and defence industry related careers through the Hunter branch of Regional Development Australia's Defence Industry Skilling Program.¹⁸⁴

Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 13.

Evidence, Mr Challen, 3 August 2017, p 13.

Submission 25a, Hunter Business Chamber, pp 8-9.

Regional Development Australia – Hunter, ME Program, STEM workforce initiative, http://www.meprogram.com.au/.

Submission 18, Regional Development Australia, p 11; Submission 25a, Hunter Business Chamber, pp 8-9.

- 3.106 The Greater Hunter Makers Festival was coordinated by the Australian Industry Group (with the Department of Industry being a major supporter). The festival took inspiration from other countries that have reshaped their manufacturing sectors in response to the decline of traditional manufacturing. The festival had the following objectives:
 - change the perceptions of the Hunter community about modern manufacturing, and promote key industries such as defence
 - demonstrate the strength of teaching and research relationships with industry
 - showcase the Hunter's manufacturing and technology capabilities to generate new business
 - engage with local schools and students to show them the value of a manufacturing career. 186
- 3.107 Mr Mark Goodsell, Head, New South Wales, Australian Industry Group NSW, advised that the festival was successful in demonstrating to students the importance of STEM and how it can be used in practical sense in an interesting vocation:

The most frequent comment that was made by [fair] visitors ... was "I did not know we made that here." ... [It] excited school kids about what you could do if you stayed awake in maths class. When we talk about science, technology, engineering and mathematics [STEM], it is as much about the teaching of it as careers in it. It is about putting it in context. It was a successful program which we intend to continue. 187

- 3.108 Complementing the NSW Government Defence and Industry Strategy and certain industry initiatives the Department of Education is seeking to improve the quality of STEM education via:
 - raising expectations and enhancing the quality of student learning in STEM
 - fostering quality teaching and leadership in STEM
 - develop learning experiences through the use of project-based learning strategies
 - trailing quality integrated STEM programs in schools across the state. 188

Access to training that meets industry needs

3.109 An important component to supporting and growing the New South Wales defence industry is to ensure greater access to training that meets industry needs. The discussion paper sought stakeholder views on how the government can help facilitate better connections between universities and industry, and increase access to advanced trades courses in regional areas. 189

Submission 40, Australian Industry Group NSW, p 7.

Submission 40, Australian Industry Group NSW, p 6.

Evidence, Mr Goodsell, 4 April 2018, p 23.

NSW Department of Education, Learning for the Future – STEM, https://education.nsw.gov.au/teaching-and-learning/curriculum/learning-for-the-future/stem.

Standing Committee on State Development, NSW Legislative Council, *Discussion paper: Defence industry in New South Wales* (2017), pp 32-34.

- 3.110 Charles Sturt University called on the government to support defence industry tertiary pathways. The university argued that this could be achieved via investment in a 'a defence industries technical skills development fund of up to \$25 million per annum, which would provide full and part scholarships to defence force personnel and future students looking to develop careers in the defence industries to off-set HELP debt.' 190
- 3.111 The Australian Industry Group NSW argued that a proposed defence industry technical skills development fund should be considered by the government 'in the context of improving the pathways for VET [vocational education and training] students to progress their career options through university with merit based scholarships provided through this fund'. 191
- 3.112 The Australian Industry Group NSW also highlighted the importance of TAFE in developing skills. It was argued that in some instances TAFE provides graduates with more practical skills that are preferred by industry and for this reason should be promoted as a pathway to tertiary study:

It is not unusual for 4th year apprentices in advanced manufacturing to be undertaking an advanced diploma in their 4th year. In fact, many advanced manufacturing companies prefer employees to advance along a trade pathway before transitioning to a degree because they obtain practical skills that university courses do not impart or impart to craftsman level. The trade pathway produces much more practically oriented engineers. 192

- 3.113 The Hunter Business Chamber called on the government to take a holistic view of how defence industry skills are being delivered in regional areas so that gaps can be identified and addressed across all educational institutions. 193
- 3.114 Shoalhaven City Council argued that despite vocational education being highly important to the defence industry, students and staff are often required to travel long distances, usually to Sydney, in order to undertake vocational training. 194 A consequence is that travel can be expensive both for students and defence industry enterprises and could therefore potentially dissuade some students from pursuing study in an advanced trades course, and by extension, a career in the defence industry. 195
- 3.115 Mr Williams, Chair, Sydney Aerospace and Defence Interest Group, and Member of Centre for Defence Industry Capability Advisory Board, commented that defence has a visibility issue which is only just beginning to be addressed through marketing. He noted that engineering graduates are more likely to pursue in careers in finance than defence. For Mr Williams, universities are producing the right graduates but the link between tertiary study and a career in defence needs to be made more apparent to those graduates:

There has been a very, very serious media campaign around the industry behind defence to try to lift the profile and the visibility of defence. One of the key things that has been

Submission 26, Charles Sturt University, p 14.

Submission 40, Australian Industry Group NSW, p 10.

Submission 40, Australian Industry Group NSW, p 10.

Submission 25a, Hunter Business Chamber, p 9.

Submission 19, Shoalhaven City Council, p 3.

Submission 19, Shoalhaven City Council, p 3.

found is that in New South Wales, for example, university graduates in engineering are much more likely to go into finance than into defence because they just do not see any jobs in defence. There is no visibility of jobs in defence. Yet if you are an engineering student you use maths and so there is that transition. We are creating the rights sort of graduates. There has got to be meaningful work at the end of the degree. So that visibility of: Is there work in New South Wales for engineering graduates in the defence marketplace?¹⁹⁶

3.116 Mr Williams added that certain universities have begun to acknowledge that there are jobs in the defence sector but that this increasing visibility will take time to have an effect:

If you ask at Macquarie, UTS or the University of Sydney at the moment there are starting to be groundswell of "Oh, there are jobs." These universities, through the Defence Innovation Network, are starting to set up parts of their universities, particularly targeting defence work which means in postgraduate and what have you. The ecosystem is not simple where you just say, "Throw money at it; it's better." It takes time to build it because it has taken time for it to fall off.¹⁹⁷

3.117 Mr Jenkins from Thales Australia also acknowledged the importance of promoting the defence industry and making it more visible to students. According to Mr Jenkins it is possible that university enrolments in engineering and science will decline which could cause work to be taken offshore. He argued that a reason for this is that not enough is known about the exciting technical work being undertaken by the defence industry and called on the government to do more to promote it:

This State has the perfect message to sell publicly I think and unless we change gears on that I worry that we will see a fall-off in engineers and scientists coming through the schools, coming through the universities. That means we have to export that work and that is the beginning of the end for the kind of clever stuff we do...

The NSW Government could help – even through it is not a silver bullet – just with a TV campaign or some other campaign that advertises the really amazing technologies being created in the State and the work that is happening in the universities that leads to real things being generated, exported and used in defence, infrastructure and around the place.'198

Committee comment

- 3.118 The committee acknowledges the calls of inquiry participants for the NSW Government to do more to help develop a sustainable and skilled workforce for the defence industry. To that end, the committee is encouraged by a number of the initiatives and strategies contained in *New South Wales: Strong, smart and connected, The NSW Government Defence and Industry Strategy 2017* that seek to provide the defence industry with its future workforce.
- 3.119 The committee recognises that New South Wales has the largest number of defence-related skilled workers of all the states and territories and displays considerable expertise in areas relevant to defence including engineering, ICT, manufacturing and systems integration.

Evidence, Mr Williams, 4 April 2018, p 14.

Evidence, Mr Williams, 4 April 2018, p 14.

¹⁹⁸ Evidence, Mr Jenkins, 3 August 2017, pp 43-45.

However, this is no reason to be complacent and there are definitely challenges that need to be addressed.

- 3.120 Of particular concern is the need to reverse the decline of student participation in Science, Technology, Engineering and Mathematics (STEM) subjects. This decline hinders the development of a technically skilled workforce and may ultimately lead to the unfortunate outcome of jobs moving offshore.
- 3.121 The committee supports initiatives such as the ME Program and their objectives of promoting increased interest in STEM. We also support actions to make the defence industry more visible and promote the interesting career opportunities it can provide. It is therefore recommended that the NSW Government look for opportunities to provide funding for initiatives that seek to:
 - raise student awareness about career opportunities in Defence and the defence industry
 - increase the number of students studying Science, Technology, Engineering and Mathematics (STEM) subjects.
 - 3.122 The committee acknowledges the suggestions of inquiry stakeholders regarding how to ensure greater access to training that meets defence industry needs. It is therefore recommended that Defence NSW continue to work with all stakeholders to ensure the industry has access to the skills it needs to provide pathways to careers in the defence industry.

Recommendation 9

That the NSW Government look for opportunities to provide funding for initiatives that seek to:

- raise student awareness about career opportunities in Defence and the defence industry
- increase the number of students studying Science, Technology, Engineering and Mathematics (STEM) subjects.

Recommendation 10

That Defence NSW continue to work with all stakeholders to ensure the industry has access to the skills it needs to provide pathways to careers in the defence industry.

Exports

3.123 In November 2017 the Department of Defence released the Defence Export Strategy which set out at the Australian Government's policy to plan, guide, and measure defence export outcomes. The aim of the Strategy is to by 2028: 'achieve greater export success to build a stronger, more sustainable and more globally competitive Australian defence industry to support Australia's Defence capability needs'. 199

Australian Government, Department of Defence, Defence Export Strategy – Fact Sheet, p 1.

3.124 The Defence Export Strategy is to be implemented through the recently established Australian Defence Export Office within the Department of Defence. The Centre for Defence Industry Capability will have an increased role under the strategy. A new Australian Defence Export Advocate will also be appointed to undertake 'high-level advocacy in pursuit of Australian defence exports internationally and undertake domestic stakeholder engagement with industry and State and Territory governments to ensure coordination of effort'. 200

Export figures

- 3.125 At a national level, statistics suggest that Australia is running a considerable deficit in the trade of military technology.
- 3.126 The NSW Defence Advocate illustrated the extent of this deficit advising that recent statistics positioned Australia as the fifth largest importer of military technology, and the nineteenth largest exporter of military technology, and that this trade was taking place at a ratio of approximately 12:1.²⁰¹
- 3.127 Australia currently achieved in the order of \$1.5 billion \$2.5 billion per annum in defence exports. ²⁰² The majority of which are to the United States, Europe and New Zealand. ²⁰³

Export challenges

3.128 Mr Chris Williams, Chair, Sydney Aerospace and Defence Interest Group, and Member of Centre for Defence Industry Capability Advisory Board, described some of the challenges facing Australian industry in seeking access to international markets. Mr Williams advised that 'aggressive' local content and offset rules add to export-associated costs:

The local content rules in other nations are much more aggressive. Canada has a 100 per cent offset regime. If I wanted to supply \$1 million worth of kit to the Canadian shipbuilding program, I would have to buy \$1 million worth of maple syrup.²⁰⁴

3.129 Mr Williams added that to sell overseas a business must have an overseas presence. This requires expenditure both in time and money:

We cannot win that [export] work in Australia; we must get on a plane and go overseas. The decision-makers for these programs are not in Australia; the engineering decision-makers for vehicles and ships are overseas. We have to be over there, and that requires financial resources and support, targeting and missions.²⁰⁵

Australian Government Department of Defence, New Defence Export System, http://www.defence.gov.au/Export/Strategy/NewExportSystem.asp.

Evidence, Air Marshall (Retd) Harvey, New South Wales Defence Advocate, 3 August, p 5.

²⁰² Australian Government, Department of Defence, Defence Export Strategy – Fact Sheet, p. 1.

Australian Trade and Investment Commission, *Australian Defence Industry*, https://www.austrade.gov.au/local-sites/singapore/contact-us/australian-defence-industry.

Evidence, Mr Williams, 3 August 2017, p 30.

Evidence, Mr Williams, 3 August 2017, p 30.

- 3.130 Dr Ben Greene, Chief Executive Officer, Electro Optic Systems, advised that Australia can only export defence products to 12 countries and also identified local content and offset rules as a significant cost:
 - ... [We] are only allowed to export to about 12 countries. One of the things that governments have to remember is that exports are a double-edged sword; for every 10 jobs we create with a new product, between two and four come to Australia because of the offset requirements of the other countries. We could have more jobs out of every 10, but we never get enough cooperation within Australia to get the full benefit.²⁰⁶

Maximising export potential – Electro Optic Systems²⁰⁷

Formed in 1983, and publicly listed in 2002, Electro Optic Systems (EOS) is a leading Australian technology company operating in the defence and aerospace markets, and is the sole indigenous provider of military space based services and remote weapon stations for land based tactical platforms. EOS has a global presence with operating entities established in Australia, USA, Germany and Singapore. EOS Defence Systems currently operates from premises in Queanbeyan, New South Wales where they develop, market, manufacture and support remote weapon systems and related products for global military and defence, and will operate from purpose built facilities in Hume, ACT by the end of 2017. The EOS satellite laser ranging facility at Mount Stromlo, ACT is part of a global network of some 30 observatories using laser light to measure distances to orbiting satellites, and is currently home to EOS Space Systems. Dr Greene, the founder explained: 'We have been at times the largest Defence exporter in Australia. We are currently, I think, still the largest in New South Wales ... It took us ... 27 years to export our first billion dollars, but we are currently accruing export orders of about a billion dollars every five quarters. The company has been on a very, very rapid trajectory.' Reflecting on the reasons for his export success, Dr Greene explained 'Our export success is based on the fact that we deliberately identify niches that are too large for a normal SME to address and probably too small for large aerospace corporations and there has to an unmet need'.

Committee comment

3.131 The committee supports the implementation of the Australian Government's Defence Export Strategy and its objectives to achieve greater export success to build a stronger, more sustainable and more globally competitive Australian defence industry. The committee encourages Defence NSW to review this strategy and to identify potential export opportunities for New South Wales.

Aerospace precinct opportunities

3.132 This section discusses two aerospace precinct development opportunities at the Western Sydney Airport and the Hunter Defence Aerospace Park.

Evidence, Dr Ben Greene, Chief Executive Officer, Electro Optic Systems, 24 October 2017, p 9.

Evidence, Dr Greene, 24 October 2017, pp 8 9; Electro Optic Systems, *About Us*, http://www.eos-aus.com/eos/about-us.

Western Sydney Airport Aerospace Precinct

- 3.133 The New South Wales Government is actively promoting an aerospace and defence industry precinct in the vicinity of the new Western Sydney airport. Northrop Grumman has been secured as an anchor tenant and its plans include a \$50 million investment in an advanced defence electronics maintenance and sustainment centre. ²⁰⁸
- 3.134 The Western Sydney Aerospace and Defence Industry Precinct project is being led by the Department of Industry. Mr Challen, Department of Industry, advised that key to the project's success was 'getting the value proposition right for industry'. Primary objectives for the Department concern securing the support of universities, research and development organisations, as well as anchor tenants, and building a supporting SME supply chain. Mr Challen argued that this would provide the necessary conditions to promote collaboration amongst relevant stakeholders:

In that Aerospace and Defence Industry Precinct we are focusing on getting the value proposition right for industry. That is around universities, research and development, getting in the anchor tenants—the big prime contractors such as Northrop Grumman—and building the SME supply chain around it. It is about looking at a variety of skill sets, so we have to bring in universities and TAFE. The key ingredient is to drive collaboration between industry, universities and government.²⁰⁹

- 3.135 A number of industry representatives voiced their support for the Aerospace and Defence Industry precinct. For example, the Australian Industry Group NSW stated that 'an aerospace precinct at the Western Sydney airport presents a once in a lifetime opportunity to integrate defence industry strategy with broader capability enhancement and global engagement in advanced manufacturing and related sectors.'210
- 3.136 The Australian Industry and Defence Network NSW supported the establishment of the Aerospace and Defence Industry Precinct stating that not only will it 'facilitate development of common infrastructure for NSW defence companies' but also 'demonstrate strongly the commitment of the NSW government support for the defence industry. As such, it has strong potential to influence prime contractors to locate their defence and aerospace facilities in Western Sydney'.²¹¹
- 3.137 The Hunter Business Chamber and HunterNet (Hunter Defence) emphasised the importance of considering the regional impacts of the western Sydney proposal. Hunter Defence stated that 'the development of an aerospace precinct in Western Sydney should be undertaken giving due regard to existing aerospace assets (Williamtown)' and that the two aerospace precincts should 'complement' rather than 'compete' with each other.²¹²
- 3.138 Mr Challen advised that it is the government's intention for the Western Sydney Aerospace and Defence Industry Precinct to complement existing facilities and not cannibalise what it is already out there:

Evidence, Mr Challen, 4 April 2018, p 7.

Evidence, Mr Challen, 4 April 2018, p 7.

Submission 40, Australian Industry Group NSW, p 3.

Submission 16a, Australian Industry and Defence Network NSW, p 3.

Submission 25a, Hunter Business Chamber and HunterNet, p 6.

We have made very clear how we are going to attract businesses and investments to the precinct. It has to complement the other existing facilities—not only around New South Wales but around the whole of Australia. We are very mindful that obviously some overlap may occur but we do not want to pick up and move industries from one area into that precinct. So we have to be very mindful and very focused on the fact that we want to attract new businesses into the precinct. We may also look to attract businesses that might have outgrown where they are now. The reality is that they will have to leave that facility if they have big expansion plans. We have made a conscious effort to make sure that it complements the other places—Melbourne, Brisbane, Canberra and the other regional bases around New South Wales. It has been top of our minds not to cannibalise, but really complement the existing facilities.²¹³

Hunter Defence Aerospace Park

- 3.139 The committee also heard evidence of significant development opportunities at lands referred to as the Hunter Defence Aerospace Park. This is a 78 hectare parcel of land adjacent to, and controlled by Newcastle Airport. The site neighbours the RAAF base at Williamtown and the Williamtown Aerospace Centre.²¹⁴
- 3.140 Newcastle City Airport contended that the site 'has significant potential for the development of an aerospace park' capable of 'supporting 3,000 to 5,000 ongoing jobs' and bringing 'more than \$500 million annual spend' into the state. Newcastle Airport advised that the opportunities for this site are 'generally supported by detailed studies' including a Feasibility Assessment of the Williamtown Defence and Aerospace Related Employment Zone, commissioned by the Department of Industry and that the proposals for the site align with both broad planning and Defence specific policy. 16
- 3.141 Newcastle Airport advised that historically, 'site constraints have precluded the successful initiation of an aerospace project by a private developer'. However, given the site is now controlled by Newcastle Airport it is has 'the ability to purchase and develop a regional aerospace cluster, with immediate effect, enabling alignment to market forces and key Defence contracts' including the substantial spending resulting from the Joint Strike Fighter program.²¹⁷
- 3.142 Newcastle Airport argued that the benefits of the proposed Hunter Defence Aerospace Park would be felt throughout the state and include: 'employment, population retention and growth, skills development and export potential, benefits that will flow from the precinct given the appropriate level of stakeholder support'. Newcastle Airport further stated that if the Hunter Defence Aerospace Park was 'developed in conjunction with the civilian airport and with some initial [support] from Government, the estate will be economically self-sustaining, eventually building a significant income stream for the local government shareholders'. 219

Evidence, Mr Challen, 4 April 2018, p 7.

Submission 21, Newcastle Airport, p 2.

Submission 21, Newcastle Airport, p 2.

Submission 21, Newcastle Airport, p2.

Submission 21, Newcastle Airport, p 3 and p 7.

Submission 21, Newcastle Airport, p 7.

Submission 21, Newcastle Airport, p 12.

Committee comment

3.143 The committee believes that the establishment of an Aerospace and Defence Industry Precinct at the Western Sydney Airport presents considerable economic opportunity for New South Wales, and in particular the defence industry. However, the committee is also mindful of the need for this project to complement pre-existing infrastructure and facilities. It is recommended the government assist new businesses to establish in the Western Sydney Aerospace and Defence Industry Precinct and not facilitate the relocation of regionally-based businesses.

Recommendation 11

That the NSW Government assist new businesses to be established in the Western Sydney Aerospace and Defence Industry Precinct and not facilitate the relocation of regionally-based businesses.

Supporting research and innovation

3.144 New South Wales has a significant level of local and international investment in research and development through its leading universities and research institutions.²²⁰ Such research and development is essential to developing and maintaining Defence's capability requirements into the future.

Australian Government initiatives

- 3.145 The Australian Department of Defence advised that there are major opportunities for New South Wales based industry and the research sector to partner with Defence to support Defence capability. The establishment of the Defence Innovation Hub and the Next Generation Technologies Fund are of particular significance.
- 3.146 The Defence Innovation Hub was launched at the end of 2016 as part of a \$1.6 billion investment from the Australian Government in Defence innovation. The Hub is 'managing a portfolio of Defence innovation investments bringing together Defence, industry, academia and research institutions to collaborate of innovative technologies that can be developed into advanced capability for Defence'. 222
- 3.147 The Next Generation Technologies Fund has been established to facilitate new approaches to strategic research partnerships to meet future Defence needs. With a budget of \$730 million over the next decade, the fund seeks to address Defence science and technology priorities through collaborative programs. The Department for Defence noted strong engagement with universities and the defence industry in New South Wales for stated based initiatives underway.²²³

²²⁰ Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 26.

Submission 32, Department of Defence – Australian Government, p 10.

Submission 32, Department of Defence – Australian Government, p 10.

Submission 32, Department of Defence – Australian Government, p 12.

The Defence Innovation Network

- 3.148 One of the most significant initiatives to be implemented by the NSW Government is the Defence Innovation Network (DIN). This initiative brings together seven leading New South Wales universities with the intent of supporting defence-related research and development across the State. The NSW Government has provided \$1.25 million of funding.²²⁴
- 3.149 The DIN has close ties with the Defence Science Technology Group within the Australian Department of Defence, via an embedded staff member. According to the government the DIN will act as broker by engaging with industry about its problems and challenges, and then finding the right people within universities to solve them.²²⁵
- 3.150 Professor Bradley Williams, Director of the Defence Innovation Network, advised that the DIN's remit is to assist defence related research and innovation in the state in the first instance and more widely thereafter:

Our seven-member universities bring a depth and scope of skills, core competencies and facilities to bear for the defence industry in a way that is unprecedented in New South Wales. The simple act of providing a single portal to seven universities is a major step forward and is seen by defence companies, especially small- to medium-sized enterprises as a boon. We believe in the intentions and objectives of the DIN and are working hard to ensure its success. Each of the member universities has made noteworthy commitments to the DIN, which cover the next few years in the form of doctoral stipends and in-kind logistical and other support.²²⁶

- 3.151 Stakeholders were typically supportive of the DIN initiative. For example, Regional Development Australia Sydney commended the DIN's establishment and its focus on universities partnering with industry to 'grow defence business opportunities' and 'commercialise solutions for use by defence'. Regional Development Australia Sydney also called for the DIN's membership to be expanded beyond its current constitution of seven universities.²²⁷
- 3.152 Dr Gregor Ferguson, Chair, Innovation Subcommittee, Sydney Aerospace and Defence Interest Group, supported the DIN's establishment and objectives but argued that similar organisations in Victoria and South Australia have greater resources and that has allowed them to develop a 'wellhoned routine of outreach, of communication, of ensuring that members are kept aware of opportunities and of sharing opportunities with members as they come up.' Dr Ferguson urged the government to learn from the success of other jurisdictions and provide the DIN with the resources needed to be effective.²²⁸

Media Release, Department of Industry, 'University Network to Drive NSW Defence', 3 November 2017

Media Release, Department of Industry, 'University Network to Drive NSW Defence', 3 November. 2017

Evidence, Professor Bradley Williams, Director, Defence Innovation Network, 4 April 2018, p 28.

²²⁷ Submission 6a, Regional Development Australia – Sydney, p8.

Evidence, Dr Gregor Ferguson, Chair, Innovation Subcommittee, Sydney Aerospace and Defence Interest Group, 4 April 2018, p 34.

3.153 Professor Williams, Director of the DIN called for more secure funding for the Defence Innovation Network, advising that current funding had only been secured for a 12 month period. Professor Williams advised that this was leading to a number of operational and recruitment challenges:

...stable medium-term funding is not year-to-year funding because that does not enable proper planning. Also from an operational point of view it makes things quite difficult for us. We have seen that in a recruitment drive ... We struggle to get a large pool of applicants for what is actually quite a good position in our network and that is because you are restricted to a 12-month contract. ²²⁹

3.154 Dr Chris Armstrong, Acting New South Wales Chief Scientist and Engineer, advised that despite having funding approval for 'a couple more years for the DIN' the approach taken in the initial stages has been to 'plan out milestones on a year-by-year basis because it is such a dynamic environment' Dr Armstrong conceded that 'understanding longer term issues would be helpful as well' and argued that a balance needed to be met.²³⁰

Collaboration between Defence, industry and academia

- 3.155 Inquiry participants commonly agreed that collaboration between Defence, industry, and academia is vital to the successful development of the defence industry in New South Wales. The need to facilitate collaboration is a key feature of NSW Government Defence and Industry Strategy. For example, initiative 5A is seeking to 'enhance Defence and industry collaboration networks with universities to enable faster development and commercialisation of technologies'.²³¹
- 3.156 Stakeholders have commended the NSW Government for its commitment to improving collaboration. However, suggested several ways that can further strengthen the NSW Government's plan to improve collaboration across defence, industry, and academia in developing the workforce for the defence industry. For example, Professor Valerie Linton, at the Faculty of Engineering and Information Sciences at the University of Wollongong, stated that:

The New South Wales Government should seek further opportunities to leverage partnerships with research institutions and industry, especially start-ups, to generate greater collaboration and commercialisation of research, such as innovation hubs between universities and business in regional areas.²³²

3.157 Stakeholders also encouraged the NSW Government to provide greater incentives for universities and other tertiary institutions to seek collaborative projects with the defence industry. The BlueZone Group called on the government to 'incentivise academic organisations to seek collaboration with SME businesses in commercialisation-focused research.' 233

Evidence, Professor Williams 4 April 2018, p 36.

Evidence, Dr Chris Armstrong, Acting New South Wales Chief Scientist and Engineer, 4 April 2018, p 37.

Department of Industry, The NSW Government Defence and Industry Strategy 2017, p 15.

Evidence, Professor Valerie Linton, Faculty of Engineering and Information Sciences, University of Wollongong, 29 June 2017, p 19.

Submission 4, BlueZone Group, p 1.

Committee comment

- 3.158 The committee welcomes the recent establishment of the Defence Innovation Network (DIN). This is an important and much needed step in supporting defence research and development, and collaboration within the state.
- 3.159 The committee believes that there is opportunity to further support the DIN. In particular, the committee has noted the challenges for the DIN arising from a short-term funding approach and believes that the NSW Government should take the necessary steps to secure funding so that it can plan and hire beyond a 12-month period.

Recommendation 12

That the NSW Government secure the future funding arrangements for the Defence Innovation Network so that it can plan and hire beyond a 12-month period.

3.160 The committee notes the strength of the New South Wales research capacity in both defence and space technologies. The committee therefore recommends that the NSW Government examine the possibility of increased resourcing for the Defence Innovation Network.

Recommendation 13

That the NSW Government examine the possibility of increased resourcing for the Defence Innovation Network.

Supporting the space sector in New South Wales

- 3.161 In July 2017 the Australian Government announced a review of Australia's space capability to enable the nation 'to capitalise on the increasing opportunities within the global space industry sector'. The review was led by an Expert Reference Group and the final report has been delivered to the Australian Government and is currently under consideration.²³⁴
- 3.162 In May 2018, as part of the 2018-19 Budget, the Australian Government announced the establishment of an Australian Space Agency. The Agency is scheduled to commence operations in July 2018.²³⁵
- 3.163 The Agency will have core responsibilities including: the development of Australia's space industry; coordination of domestic space activities; engaging with key government stakeholders

Australian Government, Department of Industry, Innovation and Science, Review of Australia's Space Industry Capability, https://industry.gov.au/industry/IndustrySectors/space/Pages/Review-of-Australian-Space-Industry-Capability.aspx.

Australian Government, Department of Industry, Innovation and Science, *Australian Space Agency*, https://industry.gov.au/industry/IndustrySectors/space/Pages/default.aspx.

- to identify and realise industry capabilities; and facilitate international space engagement to ensure Australian industry can access global supply chains.²³⁶
- 3.164 In May 2018, the Premier of New South Wales announced Australia's first astronaut, Dr Paul Scully-Power AM, would lead the state's bid to locate the nation's first space agency in Sydney. In addition Dr Scully-Power would advise the NSW Government on how best to develop the space industry in New South Wales.²³⁷
- 3.165 The Premier, the Hon Gladys Berejiklian MP and the Minister for Trade and Industry, the Hon Niall Blair MLC laid out the case for the space agency to be located in New South Wales. The Premier said that there is 'no question that NSW is best placed to host it'. Minister Blair said 'NSW leads the nation in space technology and capability, with more than 40 per cent of Australia's space business. One in every three space industry jobs are already based in NSW we are the natural home for the Australian Space Agency'. 238
- 3.166 The application of an Australian space program has both Defence and civilian implications and several inquiry stakeholders identified economic opportunities for New South Wales based industry, academia and other relevant partners as a result of this investment.

Untapped opportunity for New South Wales

- 3.167 Inquiry stakeholders sought to emphasise the significant space capabilities that exist in New South Wales. This includes satellite communications, earth observation and navigation. Evidence was presented to the committee which called for the NSW Government to support the space sector in New South Wales.
- 3.168 Professor Iver Cairns, Professor in Space Physics, University of Sydney identified significant New South Wales expertise in the space engineering, industry and science sectors. Professor Cairns argued that New South Wales should seek to be the dominant state in the space sector and that the NSW Government should take immediate steps to support it:

My first point is that the time for the State of New South Wales to take action in relation to space is now; it is not after all the other states have declared themselves. We need to act now, while it is possible to have selected areas of first-mover advantage. We should not be bashful; we should, instead, emphasise that, based on the expertise we have in space engineering, industry and science, New South Wales has the dominant space sector of any of Australia's States. That dominance is across academic space research and space industry. We should be trying to lead—not follow. Arguably, the space city state of Australia is not Adelaide, South Australia or Canberra, the Australian Capital Territory; it is Sydney, New South Wales. We have the space researchers. We have the

Australian Government, Department of Industry, Innovation and Science, *Australian Space Agency*, https://industry.gov.au/industry/IndustrySectors/space/Pages/default.aspx.

Media Release, Department of Industry, 'Australia's first astronaut to launch NSW space agency bid', 23 May 2018

Media Release, Department of Industry, 'Australia's first astronaut to launch NSW space agency bid', 23 May 2018

new and growing Indigenous based space industry firms and we have accelerators. We have arguably what we need to have a dominant position. ²³⁹

3.169 Professor Cairns further argued that the primary advantage held by New South Wales was the various fields of expertise found within academic, industrial and related government sectors:

The primary advantage is that we have the experts in these various fields. For example, there is a number of groups at the University of Sydney involved in Earth observations and instrumentation, and there were similar groups at the University of New South Wales. The University of Technology, Sydney has similar expertise in applying and using data from observation satellites. Andrew Dempster and his group are the experts in GPS instruments in Australia. I could go down the list to include space weather and space situational awareness; that is, looking at events coming from the Sun and how they will affect human technology and our environment. I am one of the world experts in the area. We also have the Bureau of Meteorology Space Weather Services group here, and CubeSats and UAV hardware. We have partners in our training centre, including a company involved in a hyperspectral imaging instrument and use of data. AeroWave Communications, a communications satellite company, and a number of other companies are here in town.²⁴⁰

- 3.170 Professor Andrew Dempster, University of New South Wales echoed this position and set out a series of indicators which illustrated the state's strength in the space sector. These indicators are listed below with New South Wales having:
 - 30 per cent of Australia's space workforce
 - 50 to 75 per cent of all space revenue
 - two of four satellites launched in 2017
 - Australia's first space business accelerator
 - 17 of 45 space start ups
 - The Space Weather Service Division of the Bureau of Meteorology
 - Six of eight satellite operators
 - 40 per cent of ground station owner/operators
 - 60 per cent of satellite broadcast companies
 - 36 per cent of space science, 21 per cent space engineering R&D
 - 31 per cent of active university departments
 - The best connected international airport to support the significant international role of the agency
 - 30 per cent of satellite equipment manufactures and 46 per cent of suppliers
 - 63 per cent of space legal services
 - 49 per cent of the satellite communications sector
 - The only space research centre funded by the Australian Research Council, plus the Australian Centre for Astrobiology, The Australian Centre for Space Engineering Research and the Australian Centre for Field Robotics.²⁴¹

Evidence, Professor Iver Cairns, Professor in Space Physics, University of Sydney, Director, SpaceNET and Director of the ARC Training Centre for CubeSats, Unmanned Aerial Vehicles and Their Applications, 4 April 2018, p 29.

Evidence, Professor Cairns, 4 April 2018, p 32.

Answers to questions on notice, Professor Andrew Dempster, University of New South Wales, Director, Australian Centre for Space Engineering Research, 18 April 2018, p 1.

3.171 Professor Dempster argued that New South Wales capability was such that New South Wales would be a deserved host to a national space agency. However he also noted that the extent of the state's space capabilities is not well understood. Professor Dempster therefore called for the NSW Government to take steps to promote the New South Wales space sector:

I disagreed with Professor Cairns when he said that the time to act is now for New South Wales. I think the time for New South Wales to act would have been about two years ago. We have been jumped on by some of the other states. The message that New South Wales is dominant is not out there. The common perception would be that South Australia and the Australian Capital Territory are the places to do all your space work, which is basically not true. That is one of the things that the space sector would be looking to the Government for just a bit of noise so that we can establish our rightful place.²⁴²

- 3.172 Dr Gregor Ferguson, Chair, Innovation Committee, Sydney Aerospace and Defence Interest Group suggested that a key challenge facing the New South Wales space sector was 'opportunity awareness' and visibility. Dr Ferguson advised that steps must be taken to 'map the environment' on 'an ongoing basis and ensure that, whatever the conversation is about space, New South Wales is always a part of it'. He also noted that it was vitally important that the opportunities were always visible and accessible to relevant organisations and businesses.²⁴³
- 3.173 The committee also heard that there was particular opportunity arising from certain parts of the space industry, notably the nano and micro satellite sector. Professor Iver Cairns, University of Sydney, reflected on the predicted economic benefits arising from the growth of the CubeSat market and is potential applications and explained that growth rates were estimated to be 25 per cent or more:

The prediction is that the number of CubeSats will increase by at least a factor of four over the next five years. The associated economic benefits would be in the billions of dollars. The growth rate is not "just" 10 per cent per year but 25 per cent or more. This is expected to increase faster than that simply because we are starting to get even more economies of scale as smaller companies, such as two in South Australia - Fleet Space Technologies and Myriota - are talking about building constellations with hundreds of satellites. Google and others are talking about the same sorts of numbers. They are going into the communications field as in the Internet of Space and the Internet of Things, plus Earth observations, positioning navigation and timing things. We are talking about real commercial applications.²⁴⁴

3.174 The Department of Industry is currently developing an aerospace and space strategy in consultation with industry and academia. It is expected to be released later in 2018. ²⁴⁵ In relation to the strategy, Professor Dempster requested that consideration be given to splitting the space and aerospace sectors to ensure that each sector receives adequate profile. ²⁴⁶

Evidence, Professor Andrew Dempster, University of New South Wales, Director, Australian Centre for Space Engineering Research, 4 April 2018, p 30.

Evidence, Dr Ferguson, 4 April 2018, p 33.

Evidence, Professor Cairns, 4 April 2018, p 32

Evidence, Commodore Scott, 4 April 2018, p 41.

Evidence, Professor Dempster, 4 April 2018, p 30.

Committee comment

- 3.175 Recent space industry development represents considerable opportunity for the state of New South Wales. While space was not the primary focus of the inquiry, evidence presented to the committee identified extensive space capabilities in New South Wales based research and commercial organisations.
- 3.176 The committee heard that New South Wales is dominating the space sectors in many areas. For example, the state accounts for 30 per cent of Australia's space workforce, between 50 and 70 per cent of all space revenue, and is home to many of the research and commercial operators essential for a thriving space industry. However, the message from space representatives was clear this dominance is not well understood, that the New South Wales Government must take steps to promote the state's extensive capabilities, and the time for this action is now. The committee supports this position and welcomes the recent announcement by the Premier calling for the Australian Space Agency to be located in New South Wales.
- 3.177 The committee notes that the Department of Industry, in consultation with relevant space sector stakeholders, is developing an aerospace and space strategy. The committee encourages the NSW Government to be ambitious in its plans for the sector and that the strategy includes measures to enhance the visibility of capabilities and opportunities for relevant space based organisations.
- 3.178 The committee notes the announcement that Dr Paul Scully-Power AM is to lead the state's bid to locate the Australian Space Agency. The committee also welcomes the advocacy for New South Wales space industry from the NSW Government.
- 3.179 The committee therefore recommends that the NSW Government continue its advocacy for the New South Wales space industry and efforts to secure the Australian Space Agency for New South Wales.

Recommendation 14

That the NSW Government continue its advocacy for the New South Wales space industry and efforts to secure the Australian Space Agency for New South Wales.

- 3.180 It is New South Wales based space researchers that are leading the new Space 2.0 agenda, focused on nano and micro satellites. The committee received evidence that this part of the industry is growing at 25 per cent a year, well above the growth of 10 per cent a year across the rest of the space sector.
- 3.181 New South Wales is already the leading space research jurisdiction in Australia. In order to strengthen this position, the committee recommends that the NSW Government:
 - add space to the list of priorities in high-tech manufacturing alongside Defence
 - seek an urgent report from the incoming NSW Chief Scientist and Engineer as to opportunities for New South Wales to join the national space effort.

Recommendation 15

That the NSW Government:

- add space to the list of priorities in high-tech manufacturing alongside Defence
- seek an urgent report from the incoming NSW Chief Scientist and Engineer as to opportunities for New South Wales to join the national space effort.

Appendix 1 Submissions

No	Author
1	Moree Plains Shire Council
2	Bisalloy Steels Pty Ltd
3	Woollahra Municipal Council
4	BlueZone Group
5	Regional Development Australia (RDA) Illawarra
5a	Regional Development Australia (RDA) Illawarra
6	Regional Development Australia - Sydney
6a	Regional Development Australia - Sydney
7	Blacktown City Council
8	University of Wollongong
9	Harwood Marine
10	Quickstep Holdings Limited
11	Illawarra Innovative Industry Network Incorporated (i3net)
12	Shoalhaven Defence Industry Group
13	Orange City Council
13a	Orange City Council
14	Mr Christopher Skinner
14a	Mr Christopher Skinner
15	Defence Materials Technology Centre (DMTC) Limited
15a	Defence Materials Technology Centre (DMTC) Limited
16	Australian Industry & Defence Network NSW
16a	Australian Industry & Defence Network NSW
17	Port Stephens Council
18	Regional Development Australia - Hunter
18a	Regional Development Australia - Hunter
19	Shoalhaven City Council
19a	Shoalhaven City Council
20	Kinexus
21	Newcastle Airport Pty Ltd
21a	Newcastle Airport Pty Ltd
22	Wollongong City Council
23	Clarence Valley Council

No	Author
24	Engineers Australia
25	Hunter Business Chamber
25a	Hunter Business Chamber
26	Charles Sturt University
26a	Charles Sturt University
27	Newcastle City Council
28	Thales Australia
29	ACT Government
30	Potts Point & Kings Cross Heritage & Residents' Society
31	Defence NSW, NSW Department of Industry
32	Department of Defence - Australian Government
33	Carbonix
34	2JC Pty Ltd
35	University of Newcastle
35a	University of Newcastle
36	ServeGate Australia
37	OCIUS Technology Ltd
38	McLean Management Consultants Pty Ltd and AMUSERV Pty Ltd
39	Mission Systems Pty Ltd
40	Australian Industry Group

Appendix 2 Witnesses at hearings

Date	Name	Position and Organisation
Thursday 29 June 2017	Mr Tony Green	Executive Officer, i3net
Gallery Function Room, Shoalhaven	Mr Laurie Koster	Chairperson, Shoalhaven Defence Industry Group
	Mr Canio Fierravanti	Director, Government Relations, University of Wollongong
	Professor Valerie Linton	School of Mechanical, Materials, Mechatronic and Biomedical Engineering and Information Sciences, University of Wollongong
	Ms Debra Murphy	Regional Development Australia (Illawarra)
	Mr Greg Pullen	Economic Development Manager, Shoalhaven City Council
Thursday 3 August 2017, Macquarie Room, Parliament House	Mr Simon Smith	Secretary, NSW Department of Industry
	Mr Duncan Challen	Executive Director, Industry Development, NSW Department of Industry
	Commodore Peter Scott, CSC, RANR	Director, Defence NSW, NSW Department of Industry
	Air Marshal (Ret'd) John Harvey AM	NSW Defence Advocate
	Mr Chris Shaw	Director and Lead Hardware Engineer, Advanced Navigation
	Mr Jeff Eager	Executive General Manager, Carbonix
	Mr Matthew Ramage	Acting First Assistant Secretary Defence, Industry Policy, Department of Defence
	Ms Kate Lundy Mr Geoff Keogh	ACT Defence Industry Advocate Director - Innovation Policy & Diversification Strategy, ACT Government

Date	Name	Position and Organisation
	Mr Chris Williams	Sydney Aerospace and Defence Interest Group
	Mr John Pearson	Project Development Manager, Regional Development Australia, Sydney
	Mr Chris Jenkins	Chief Executive Officer, Thales Australia
	Mr Mark Burgess	Chief Executive Officer, Quickstep Holdings Limited
	Mr Neil Hodges	Chief Executive Officer, BlueZone Group
	Dr Mark Hodge	Chief Executive Officer, Defence Materials Technology Centre, Victoria
Monday 14 August 2017, Moresby Room, Orange Ex- Services' Club, Orange	Mr Gary Styles	General Manager, Orange City Council
Services Glub, Grange	Ms Kathy Woolley	Director, Corporate and Communication Services, Orange City Council
	Professor Andrew Vann	Vice Chancellor, Charles Sturt University
	Mr Peter Fraser	Director, Government and Community Relations, Charles Sturt University
	Professor Chang-Tsun Li	Professor in Computing, Charles Sturt University
	Professor Terry Bossomaier	Professor of Computer Systems, Charles Sturt University

Date	Name	Position and Organisation
Monday 28 August 2017, Harvard Room, Tweed Shire Council	Mr Des Schroder	Director Environment, Planning and Community, Clarence Valley Council
	Mr Ross Roberts	Managing Director, Harwood Marine
Tuesday 29 August 2017, Council Chambers, Armidale Regional Council	Mr Peter Dennis	Chief Executive Officer, Armidale Regional Council
	Mr Lindsay Woodland	Group Leader, Organisational Services, Armidale Regional Council
	Mr Greg Winslett	Director, Teaching and Learning Support, University of New England
Monday 18 September 2017, The Seaview Room, Harbour Views Function Centre, Newcastle	Mr Richard Anicich	Director, Hunter Business Chamber
	Mr Tony Cade	Chief Executive Officer, HunterNet
	Ms Susan Wilson	Chief Executive Officer, Regional Development Australia, Hunter
	Mr Greg Fenwick	Economic Development Facilitator, Newcastle City Council
	Ms Jill Gaynor	Manager Strategic Planning, Newcastle City Council
	Mr Peter Gesling	Chair, Newcastle City Airport
	Mr Peter Cock	Chief Executive Officer, Newcastle City Airport
	Mr James Garvey	2JC Party Limited
Tuesday 25 October 2017, Farrer Room, Best Western Central Motel, Queanbeyan	Mr Stuart Althaus	Chief Executive Officer, SME Gateway
		Managing Director, Meccanica

Date	Name	Position and Organisation
	Mr Robert Boz	Managing Director, Meccanica
	Mr Warren Williams	Managing Director, Codarra Advanced Systems
	Dr Ben Greene	Chief Executive Officer, Electro Optic Systems
	Mr Steve Bowden	Director, Spearpoint
Wednesday 4 April 2018, Macquarie Room, Parliament	Commodore Peter Scott CSC, RANR	Director, Defence NSW
House	Mr Duncan Challen	Executive Director, Industry Development, NSW Department of Industry
	Ms Anna Murray	NSW Vice-president, Australian Industry & Defence Network
	Ms Evelyn Nordhoff	Defence Industry Facilitator – New South Wales, Centre for Defence Industry Capability
	Mr Trent Goldsack	Business Advisor, Centre for Defence Industry Capability
	Mr Chris Williams	Chair, Sydney Aerospace and Defence Interest Group
	Mr Stewart Noel	Executive, Sydney Aerospace and Defence Interest Group
	Ms Therese O'Dwyer	Acting Executive Officer, Regional Development Australia, Sydney
	Air Marshall (Ret) John Harvey AM	NSW Defence Advocate
	Mr Mark Goodsell	Head - New South Wales, Australian Industry Group
	Mr Bob Hawes	Chief Executive Officer, Hunter Business Chamber, Hunter Defence

Name	Position and Organisation
Mr Laurie Koster	Chairperson, Shoalhaven Defence Industry Group
Dr Chris Armstrong	Acting / NSW Chief Scientist and Engineer
Professor Bradley Williams	Director, Defence Innovation Network and Professor of Chemistry, University of Technology Sydney
Professor Iver Cairns	Professor in Space Physics, University of Sydney Director, SpaceNet Director of the ARC Training Centre for CubeSats, UAVs and Their Applications
Professor Andrew Dempster	The University of New South Wales, Director, Australian Centre for Space Engineering Research
Dr Gregor Ferguson	Chair – Innovation Sub Committee, Sydney Aerospace and Defence Interest Group
	Mr Laurie Koster Dr Chris Armstrong Professor Bradley Williams Professor Iver Cairns Professor Andrew Dempster

Appendix 3 Minutes

Minutes no. 23

Tuesday 9 May 2017 Standing Committee on State Development Member's Lounge, Parliament House, at 2.15 pm

1. Members present

Mr Pearce, *Chair*Mr Veitch, *Deputy Chair*Mr Colless
Mr Graham
Mr Green
Mrs Maclaren-Jones

2. Draft minutes

Resolved on the motion of Mr Green: That draft minutes no 22 be confirmed.

3. Correspondence

The committee noted the following items of correspondence:

Received:

- 18 April 2017 Email to Committee from Mr Jeff Stien, Senior Economic Development and Tourism Advisor, Bland Shire Council requesting the Committee hold a public hearing in West Wyalong and advising that Bland shire Council is the fourth fastest growing regional LGA in NSW, with attachments
- 2 May 2017 Letter to Committee from Jenny Rudolph, NSW & Education Executive Officer, Planning Institute of Australia NSW, commenting on the Committee's recommendations included in its *Regional planning processes in NSW* report
- 3 May 2017 Letter to Chair from the Hon Niall Blair MLC, Minister for Primary Industries, Minister for Regional Water and Minister for Trade and Industry, requesting the committee to consider terms of reference for an inquiry into the defence industry in New South Wales.

4. Consideration of terms of reference – Defence industry in New South Wales

The Chair tabled the following terms of reference received from the Hon Niall Blair MLC, Minister for Primary Industries, Minister for Regional Water and Minister for Trade and Industry, on 3 May 2017:

- 1. That the Standing Committee on State Development, with reference to the New South Wales: Strong, Smart and Connected Defence and Industry Strategy 2017, inquire into and report on opportunities to incentivise and grow the defence industry in New South Wales to generate economic development and in particular:
 - a. maximise opportunities for NSW-based companies from Defence's growing exports and investment in defence capability in both acquisition and sustainment;
 - b. encourage defence industry innovation, research and education including developing the future workforce
 - c. identify targets, programs and projects for defence spending in New South Wales

- d. maximise the economic benefits of locating defence force bases and defence industry in the regions
- e. how to establish and sustain defence supportive communities
- f. further enhance collaboration between the NSW Government and Commonwealth agencies
- g. any other related matter.
- 2. That the committee report by June 2018.

Resolved on the motion of Mr Green: That the committee adopt the terms of reference.

5. Conduct of the inquiry into the defence industry in New South Wales

5.1 Proposed timeline

Resolved, on the motion of Mr Veitch: That the committee adopt the following timeline for the inquiry:

- Sunday 18 June 2017 submission closing date
- August 2017 public hearing (Sydney) and site visits
- September 2017 site visits and hearing
- October 2017 possible visit to Adelaide
- December 2017 discussion paper deliberative and second round of submissions
- February 2018 closing date on second round of submissions
- March 2018 final public hearing (Sydney)
- May/June 2018 report deliberative and table report.

5.2 Stakeholder list

Resolved on the motion of Mr Veitch: That the secretariat circulate to members the Chairs' proposed lists of stakeholders to provide them with the opportunity to amend the lists or nominate additional stakeholders, and that the committee agree to the stakeholder lists by email, unless a meeting of the committee is required to resolve any disagreement.

5.3 Advertising

The committee noted that all inquiries are advertised via twitter, stakeholder letters and a media release distributed to all media outlets in New South Wales.

6. Next meeting

The committee adjourned at 2.19 pm sine die.

Alex Stedman

Committee Clerk

Minutes no. 24

Monday 19 June 2017 Standing Committee on State Development Macquarie Room, Parliament House, Sydney, at 9.20 am

1. Members present

Mr Pearce, *Chair*Mr Veitch, *Deputy Chair*Mr Colless
Mr Graham
Mr Green

2. Apologies

Mrs Maclaren-Jones

3. Previous minutes

Resolved on the motion of Mr Veitch: That draft minutes no. 23 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

- 4 May 2017 letter from the Hon Paul Toole MP, Minister for Lands and Forests to the Hon Greg Pearce MLC, Committee Chair, providing comment on the recommendations of the inquiry into economic development in Aboriginal communities
- 7 June 2017 email from Ms Amanda Jones, Chief Operating Officer and Deputy CEO, Infrastructure NSW declining invitation to make a submission and appear as a public witness for the inquiry into Regional development and a global Sydney
- 7 June 2017 email from Mr Greg Woodhams, Executive Director, City Planning, Greater Sydney Commission, declining invitation to appear as a witness for the inquiry into Regional development and a global Sydney.

Sent:

• 9 June 2017 - letter from the Hon Greg Pearce MLC, Committee Chair formally requesting that the City of Sydney provide evidence at a public hearing for the inquiry into Regional development and a global Sydney on Monday, 19 June 2017.

5. Inquiry into the defence industry in New South Wales

5.1 Hunter Defence Forum Conference

Resolved on the motion of Mr Veitch: That the Chair and Mr Graham attend the Hunter Defence Forum Conference on 22-23 August 2017 on behalf of the committee and be accompanied by one person from the secretariat.

6. Inquiry into regional development and a global Sydney

6.1 Submissions

6.1.1 Public

The committee noted that submissions nos. 1-21 and 23-30 were published by the committee clerk under the authorisation of the resolution appointing the committee.

6.1.2 Partially confidential – Name suppressed

Resolved on the motion of Mr Veitch: That submission no. 22 be kept partially confidential by suppressing the name and any other information that could potentially identify the author.

6.2 Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Ms Liz Livingstone, Executive Director, Department of Premier and Cabinet.
- Mr Chris Hanger, Executive Director, Regional Infrastructure and Networks
- Mr Stewart Webster, Director, Centre of Economic and Regional Development
- Ms Susan Calvert, A/Deputy Secretary, Skills and Economic Development Division, Department of Industry
- Ms Sandra Chipchase, Chief Executive Officer, Destination NSW.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined.

• Ms Monica Barone, Chief Executive Officer, City of Sydney

The evidence concluded and the witness withdrew.

The following witnesses from the University of Wollongong were sworn and examined.

- Mr Canio Fierravanti, Director, Government Relations
- Mr Damien Israel, Chief finance Officer
- Mr Mark Roberts, Senior Manager, Strategic Projects.

The evidence concluded and the witnesses withdrew.

The following witnesses from the Hunter Business Chamber were sworn and examined.

- Mr Bob Hawes, Chief Executive Officer
- Mr Richard Anicich, Board Director.

The evidence concluded and the witnesses withdrew.

The following witnesses from Regional Development Australia – Sydney were sworn and examined:

- Mr Bob Germaine, Executive Officer
- Ms Therese O'Dwyer, Senior Policy and Projects Manager.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined.

Mr Greg Ewing, General Manager, Engineers Australia

Mr Veitch left the meeting at 3.11 pm.

Mr Ewing tendered the following documents:

- Productivity Commission Issues Paper on National Water Reform', Engineers Australia submission, April 2017
- 'The Independent Review into the Future Security of the National Electricity Market, Engineers Australia submission, February 2017
- 'Engineering Vacancies Report' Engineers Australia, April 2017
- 'Western Sydney Rail Needs Scoping Study Response', Engineers Australia, October 2017
- 'Environmental Planning and Assessment Act Consultation Paper Response', Engineers Australia, April 2017
- 'Engineers Make Things Happen', Engineers Australia, 2017
- 'The Future of Australian Electricity Generation', Engineers Australia, 2017
- 'Government as an informed buyer', Engineers Australia, 2012.

The evidence concluded and the witness withdrew.

The following witnesses from the NSW Business Chamber were sworn and examined:

- Mr Luke Aitken, Senior Manager, Policy
- Mr Simon Spellicy, President, Tourism Advisory Council

The evidence concluded and the witnesses withdrew.

7. Tendered documents

Resolved on the motion of Mr Green: That the committee accept and publish the following documents tendered by Mr Greg Ewing, General Manager, Engineers Australia, during the public hearing:

- Productivity Commission Issues Paper on National Water Reform', Engineers Australia submission, April 2017
- 'The Independent Review into the Future Security of the National Electricity Market, Engineers Australia submission, February 2017
- 'Engineering Vacancies Report' Engineers Australia, April 2017
- 'Western Sydney Rail Needs Scoping Study Response', Engineers Australia, October 2017
- 'Environmental Planning and Assessment Act Consultation Paper Response', Engineers Australia, April 2017
- 'Engineers Make Things Happen', Engineers Australia, 2017
- 'The Future of Australian Electricity Generation', Engineers Australia, 2017
- 'Government as an informed buyer', Engineers Australia, 2012.

8. Adjournment

The committee adjourned at 4.21 pm until Thursday 29 June 2017 – regional public hearing in Nowra.

Alex Stedman

Committee Clerk

Minutes no. 25

Thursday 29 June 2017

Standing Committee on State Development

Gallery Function Room, Shoalhaven Entertainment Centre, Shoalhaven, at 9.57 am

1. Members present

Mr Pearce, Chair

Mr Veitch, Deputy Chair

Mr Graham

Mr Green

Mrs Maclaren-Jones

2. Apologies

Mr Colless

3. Previous minutes

Resolved on the motion of Mr Graham: That draft minutes no. 24 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

 20 June 2017 - letter from Mr John O'Callaghan, Director Defence and Government Relations, Australian Industry Group, requesting to give evidence to the Defence industry in New South Wales inquiry.

Sent:

- 20 June 2017 letter from the Hon Greg Pearce MLC, Committee Chair advising Mr Paul Scully MP, Member for Wollongong, that the State Development Committee will be visiting the University of Wollongong's Defence Materials Technology Centre
- 20 June 2017 letter from the Hon Greg Pearce MLC, Committee Chair advising the Hon Shelley Hancock MP, Member for South Coast, advising that the Committee will be holding a public hearing in the Shoalhaven and visiting HMAS Albatross and the Albatross Aviation Technology Park.

5. Inquiry into the defence industry in New South Wales

5.1 Submissions

5.1.1 Public

The committee noted that submission nos. 1-19 and 21-23 were published by the committee clerk under the authorisation of an earlier resolution.

5.1.2 Confidential submission

Resolved on the motion of Mr Veitch: That submission no. 20 be kept confidential, as per the request of the author.

6. Inquiry into Regional development and a global Sydney

6.1 Submissions

6.1.1 Public

The committee noted that submission nos. 31-33 were published by the committee clerk under the authorisation of an earlier resolution.

7. Public hearing – inquiries into the defence industry in New South Wales and regional development and a global Sydney

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Chris Lamont, Executive Director, Illawarra Business Chamber
- Mr Ross Bain, Policy Manager, Illawarra Business Chamber
- Ms Katherine Baker, Policy Manager, Illawarra Business Chamber
- Mr Brendan Goddard, President, Shoalhaven Business Chamber.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Tony Green, Executive Officer, Illawarra Innovative Industry Network Incorporated (i3net)
- Mr Laurie Koster, Shoalhaven Defence Industry Group.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

• Professor Valerie Linton, School of Mechanical, Materials, Mechatronic and Biomedical Engineering, Faculty of Engineering and Information Sciences, University of Wollongong.

Mr Robert Roberts, Senior Manager, Strategic Projects, University of Wollongong, on a former oath was also examined.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

• Ms Nicky Sloan, Chief Executive Officer, Illawarra Forum.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Clr Gordon Bradbery OAM, Mayor, Wollongong City Council
- Mr Mark Grimson, Economic Development Manager, Wollongong City Council.

Mr Grimson tendered the following document:

• Document entitled 'Wollongong a city transformed – investor prospectus', Wollongong City Council March 2017.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

• Ms Debra Murphy, Chief Executive Officer, Regional Development Australia – Illawarra.

Ms Murphy tendered the following documents:

- Document entitled 'Wollongong City Deal Collaborative Terms of Reference'
- Document entitled 'City Deals Input Matrix', Regional Development Australia Illawarra, June 2017
- Document entitled 'The Jewel of the East Coast The case for relocation of Royal Australian Navy Fleet Base East to the Port of Port Kembla', Regional Development Australia – Illawarra, June 2015.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

• Mr Greg Pullen, Economic Development Manager, Shoalhaven City Council.

Mr Pullen tendered the following documents:

- Supplementary information submitted by Mr Pullen , Economic Development Manager, Shoalhaven City Council
- Document entitled 'Defence Sector Strategy', Shoalhaven City Council, September 2011.

The evidence concluded and the witnesses withdrew.

8. Tendered documents

Resolved on the motion of Mr Veitch: That the committee accept and publish the following documents tendered during the public hearing:

Mr Greg Pullen, Economic Development Manager, Shoalhaven City Council:

- 'Supplementary information submitted by Greg Pullen, Economic Development Manager, Shoalhaven City Council'
- 'Defence Sector Strategy', Shoalhaven City Council, September 2011.

Ms Debra Murphy, Chief Executive Officer, Regional Development Australia – Illawarra:

- 'Wollongong City Deal Collaborative Terms of Reference'
- 'City Deals Input Matrix', Regional Development Australia Illawarra, June 2017
- 'The Jewel of the East Coast The case for relocation of Royal Australian Navy Fleet Base East to the Port of Port Kembla', Regional Development Australia Illawarra, June 2015.

Mr Mark Grimson, Economic Development Manager, Wollongong City Council:

• 'Wollongong a city transformed – investor prospectus', Wollongong City Council March 2017.

9. Adjournment

The committee adjourned at 4.13 pm until Friday 30 June 2017 – regional site visits for the Defence industry in New South Wales inquiry.

Alex Stedman

Committee Clerk

Minutes no. 26

Friday 30 June 2017

Standing Committee on State Development

Quest Apartments lobby, 130 Kinghorne Street, Nowra at 9.30 am

1. Members present

Mr Pearce, Chair

Mr Graham

Mr Green

Mrs Maclaren-Jones

2. Apologies

Mr Veitch, Deputy Chair

Mr Colless

3. Inquiry into the Defence industry in New South Wales

3.1 Site visit, Global Defence Solutions

Committee members travelled to Global Defence Solutions Bellevue Street, Nowra and met with Mr Laurie Koster, Managing Director.

3.2 Site visit, Air Affairs

Committee members travelled to Air Affairs and met with the following representatives at its Bellevue Street and Albatross Aviation Technology Park (AATP), Nowra facilities:

- Mr Chris Sievers, Managing Director
- Mr Darren Bramley, Production Manager.

3.3 Site visit, BAE Systems Australia

Committee members travelled to BAE Systems Australia's facility at the AATP and met with Mr Ian Gibney, SSC Project Manager, Aircraft Maintenance and Support.

3.4 Site visit, HMAS Albatross

Committee members travelled to HMAS Albatross, Nowra and met with:

- Commanding Officer, Captain Fiona Sneath
- Lieutenant Mark Johnson
- Mr Mark Brownsey, HATS Support Project Manager, Boeing Defence Australia
- Lieutenant Commander Chris Smith, 723 Squadron
- Mr Darren Tickner, Manager, Capability Acquisition and Sustainment Group, Helicopter Systems, Naval Aviation Systems Department of Defence.

The committee was accompanied on its site visits to the various Nowra defence facilities by Mr Greg Pullen, Economic Development Manager Shoalhaven City Council.

3.5 Site visit, Defence Materials Centre, University of Wollongong

Committee members travelled to the Defence Materials Centre, University of Wollongong and met with:

• Dr Stephen Van Duin, Program Leader

- Professor Valerie Linton, School of Mechanical, Materials, Mechatronic and Biomedical Engineering, Faculty of Engineering and Information Sciences
- Mr Damien Israel, Chief Finance Officer
- Mr Mark Roberts, Senior Manager, Strategic Projects.

4. Adjournment

The committee adjourned at 3.47 pm until Thursday 3 August 2017 (public hearing, inquiry into the Defence industry in New South Wales, Macquarie Room, Parliament of New South Wales).

Alex Stedman

Committee Clerk

Minutes no. 27

Thursday 3 August 2017 Standing Committee on State Development Macquarie Room, Parliament House, Sydney at 9:15 am

1. Members present

Mr Pearce, Chair

Mr Veitch, *Deputy Chair* (from 9.24 am)

Mr Colless

Mr Graham

Mr Green

Mrs Maclaren-Jones

2. Previous minutes

Resolved on the motion of Mr Green: That draft minutes nos. 25 and 26 be confirmed.

3. Correspondence

The committee noted the following items of correspondence:

Received:

- 12 July 2017 Email from Mr Ross Bain, Illawarra Business Chamber, requesting that answers to supplementary questions be kept confidential
- 13 July 2017 Email and letter from Ms Nicky Sloan, Illawarra Forum, declining to answer supplementary questions, due to a conflict of interest.

Sent:

- 13 July 2017 Letter from Chair to Mr Mark Brownsey, Boeing, to thank him for hosting the committee's visit on 30 June 2017
- 13 July 2017 Letter from Chair to Mr Laurie Koster, Global Defence Solutions, to thank him for hosting the committee's visit on 30 June 2017
- 13 July 2017 Letter from Chair to Mr Ian Gibney, BAE Systems, to thank him for hosting the committee's visit on 30 June 2017
- 13 July 2017 Letter from Chair to Mr Greg Pullen, Shoalhaven City Council, to thank him for hosting the committee's visit on 30 June 2017

- 13 July 2017 Letter from Chair to Mr Chris Sievers, Air Affairs Australia, to thank him for hosting the committee's visit on 30 June 2017
- 13 July 2017 Letter from Chair to Captain Fiona Sneath, to thank her for hosting the committee's visit to HMAS Albatross on 30 June 2017.

4. Inquiry into regional development and a global Sydney

4.1 Submissions

The committee noted that submission no. 34 was published by the committee clerk under the authorisation of an earlier resolution.

4.2 Answers to questions on notice

The committee noted that the answers to questions on notice provided by the following witnesses were published by the committee clerk under the authorisation of the resolution appointing the committee:

- City of Sydney, together with supplementary question on notice
- NSW Government, together with supplementary question on notice
- Hunter Business Chamber
- NSW Business Chamber
- University of Wollongong

4.3 Answers to supplementary questions

Resolved on the motion of Mr Graham: That the committee publish the answers to questions taken on notice at the hearing from the Illawarra Business Chamber but keep the answers to supplementary questions regarding RDAs confidential, as per the request of the author.

The committee noted that Ms Nicky Sloan, CEO, the Illawarra Forum, declined to answer supplementary questions relating to RDAs because she is a board member of RDA Illawarra and is concerned about a potential conflict of interest. (See letter dated 13 July 2017)

4.4 Charter flights

Travel to Orange and West Wyalong

Resolved on the motion or Ms Maclaren-Jones: That the committee authorise the use of a charter plane for the site visit to Orange and West Wyalong on 14-15 August 2017.

Travel to Tweed and Armidale

Resolved on the motion of Mr Green: That the committee authorise the use of a charter plane for the site visit to Tweed and Armidale on 28-29 August 2017.

5. Inquiry into the defence industry in NSW

5.1 Submissions

The committee noted that submissions nos 29 and 30 were published by the committee clerk under the authorisation of an earlier resolution.

5.2 Travel to Bungendore/Queanbeyan and Adelaide (via Canberra)

Resolved on the motion of Mr Colless: That the committee seek the approval of the President to undertake a two day site visit on 24-25 October to Bungendore/Queanbeyan and Adelaide via Canberra, at an approximate cost of \$10,500.

5.3 Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Simon Smith, Secretary, NSW Department of Industry
- Mr Duncan Challen, Executive Director, Industry Development, NSW Department of Industry
- Commodore Peter Scott, CSC, RANR, Director, Defence NSW, NSW Department of Industry
- Air Marshall (Ret'd) John Harvey AM, NSW Defence Advocate
- Mr Chris Shaw, Director and Lead Hardware Engineer, Advanced Navigation
- Mr Jeff Eager, Executive General Manager, Carbonics.

The evidence concluded and witnesses withdrew.

The following witness was sworn and examined:

 Mr Matthew Ramage, Acting First Assistant Secretary Defence Industry Policy, Department of Defence, Australian Government.

The evidence concluded and witness withdrew.

The following witnesses were sworn and examined:

- Ms Kate Lundy, ACT Defence Industry Advocate, ACT Government
- Mr Geoff Keogh, Director, Innovation Policy & Diversification Strategy, ACT Government.

Ms Lundy tendered the following document:

• Defence ACT, Canberra Region Defence Industry Capability Directory.

The evidence concluded and witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Chris Williams, Executive Committee Chair, Sydney Aerospace and Defence Interest Group
- Mr John Pearson, Project Manager, Regional Development Australia, Sydney.

The evidence concluded and witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Chris Jenkins, Chief Executive Officer, Thales Australia
- Mr Mark Burgess, Chief Executive Officer, Quickstep Holdings Limited
- Mr Neil Hodges, Chief Executive Officer, BlueZone Group.

Mr Jenkins tendered the following document:

• Thales, Delivering Sovereign Defence Capability from New South Wales, June 2017.

The evidence concluded and witnesses withdrew.

The following witnesses were sworn and examined:

• Mr Harry Baxter, Communications Manager, Defence Materials Technology Centre, Victoria.

The evidence concluded and witness withdrew.

The public hearing concluded at 3.58 pm.

5.4 Tendered documents

Resolved on the motion of Mr Veitch: That the committee accept and publish the following documents tendered during the public hearing:

• Defence ACT, Canberra Region Defence Industry Capability Directory, tendered by Ms Kate Lundy

 Thales, Delivering Sovereign Defence Capability from New South Wales, June 2017, tendered by Mr Chris Jenkins.

6. Adjournment

The committee adjourned at 4.00 pm until 7:00 am, Sydney Airport (regional site visits and hearings in Orange and West Wyalong).

Stephanie Galbraith

Committee Clerk

Minutes no. 28

Monday 14 August 2017 Standing Committee on State Development Moresby Room, Orange Ex-Services Club, Orange at 9.35 am

1. Members present

Mr Pearce, *Chair*Mr Veitch, *Deputy Chair*Mr Green
Mrs Maclaren-Jones

2. Apologies

Mr Colless Mr Graham

3. Previous minutes

Resolved on the motion of Mr Green: That draft minutes no. 27 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

- 10 August 2017 Various emails from Mr Jeff Stien, Senior Economic Development and Tourism Advisor, Bland Shire Council, attaching:
 - Oraft report prepared by the National Institute of Economic and Industry Research for the Newell Highway Task Force, government, primary producers and transport organisations entitled 'The Newell Highway closure in 2016 from flooding: The direct and indirect effects', dated June 2017
 - o Article, 'Australia must embrace AI revolution with automation set to affect every job, report says', ABC News online
 - o Article, 'The artificial intelligence revolution is coming and right now, Silicon Valley holds the power', ABC News online
 - Report, Alpha Beta Strategy and Economics, The Automation Advantage
 - o Regional Sports Infrastructure Fact Sheet
 - o Regional Sports Infrastructure Frequently Asked Questions
 - o Regional Sports Infrastructure Fund Guidelines
 - NSW Treasury, Economic Appraisal Principles and Procedures Simplified, Office of Financial Management Policy and Guidelines Paper

- The Treasury, NSW Government Guide to Cost-Benefit Analysis, Policy and Guidelines Paper
- The Treasury, 'TPP17-03 NSW Government Guide to Cost-Benefit Analysis', Policy and Guidelines Paper
- o Article, '3000 jobs moving west, new offices built', The Parramatta Sun
- o Article, 'Three thousand state public servant jobs moving to the west', Silverhall News
- Article, 'Government jobs move to Parramatta, but rest of western Sydney appeals for more', Sydney Morning Herald
- o Article, 'Lang Walker to build Parramatta tower for public servants', The Australian
- Article, 'NSW public servants banished from Sydney CBD, sent to Western front', Government News
- Ministerial Media Release, Minister for Finance and Services, 'Public Servants Head to Hurstville'
- o Rebuilding NSW: Western Sydney, NSW Government
- Article, 'Thousands of public servants to be moved to western Sydney', ABC News online
- o Article, 'Three thousand state public servant jobs move to the west', Daily Telegraph
- Rebuilding NSW, Regional Growth Environment & Tourism Fund Expression of Interest Form
- Presentation, 'Regional Growth Environment and Tourism Fund: Briefing for applicants', Infrastructure NSW, 16 March 2017
- o Restart NSW: Regional Growth Environment and Tourism, Expression of Interest Guidelines
- Presentation, 'Newell Highway Caravan and Camping Visitor Smart Tracker Pilot Project: Smart Cities and Regional Areas', Caravan Industry Association of Australia, 19 July 2017
- Caravan Industry Association of Australia, Caravan and Camping Visitor Smart Tracker Pilot Project, Briefing Paper – June 2017
- o Proposed NSW Silo Art Trail
- Economic Assessment of Mining Affected Communities, NSW Trade and Investment, February 2013
- Economic Assessment of Mining Affected Communities, NSW Trade and Investment, December 2011
- Restart NSW Resources for Regions, Expression of Interest Guidelines, 2013-14 Second Round
- o Resources for Regions Fact Sheet
- Resources for Regions Frequently Asked Questions
- o Restart NSW Resources for Regions Expression of Interest Guidelines 2015-16
- o Resources for Regions Program Guidelines
- o Resources for Regions Supporting our mining communities
- o Restart NSW Resources for Regions Full Project List
- List of local government areas outside the Sydney metropolitan region that are eligible to apply for the 2015-16 Resources for Regions program
- o Restart NSW Resources for Regions Expression of Interest Form
- Media release, Treasurer and Minister for Industrial Relations, 'Government commits
 \$20 million to Cobbora Fund', dated Tuesday 3 September 2013
- Media release, Member for Dubbo, 'Cobbora Transit Fund Expressions of Interest', dated 31 October 2013

- Media release, Member for Dubbo, 'Deadline approaches for Cobbora Transition Fund', dated 15 January 2014
- Media release, Member for Dubbo, 'Cobbora Transition Fund shortlist announced', dated 7 March 2014
- o Restart NSW Cobbora Transition Fund
- o Media release, Member for Dubbo, 'Have your say', dated 10 April 2014
- Media release, Infrastructure NSW, 'Community views wanted on shortlisted projects', dated 18 March 2014
- o Regional Cooperative Tourism Marketing Program, Guidelines 2017-2017 Financial Year
- o Regional Tourism Product Development Program, Guidelines 2017 2018 Financial Year.
- 11 August 2017 Various emails from Mr Jeff Stien, Senior Economic Development and Tourism Advisor, Bland Shire Council, attaching:
 - Economic Profile: Riverina-Murray, Prepared for the Economic Development Strategy for Regional NSW, dated February 2015
 - o Fact Sheet, Destination Management Planning
 - Making it happen in the regions: Regional Development Framework, NSW Department of Industry
 - o Riverina-Murray Regional Plan: 2036, NSW Planning and Environment
 - o Jobs for NSW Fact Sheet: Accelerating Growth Loans Pilot
 - o Jobs for NSW Fact Sheet: Gazelle Loan Guarantees
 - o Jobs for NSW Fact Sheet: Startup Products
 - o Jobs for NSW Fact Sheet: Regional Jobs Now
 - o Jobs for NSW Fact Sheet: Regional Solutions
 - o Regional Economic Growth Enablers, Department of Industry Centre for Economic Development, dated December 2016
 - Article, 'Invest in New South Wales: Centre for Economic and Regional Development', NSW Department of Industry
 - o MidCoast Council Regional Economic Development Strategy Fact Sheet
 - Fact sheet, Regional Economic Growth Enablers Report Summary, NSW Department of Industry Centre for Economic Development
 - Media release, Argent Minerals Limited, 'Copper and Gold in West Wyalong Porphyry
 final assays', dated 27 July 2017
 - Presentation, 'Resources rising stars', presented by Karl Simich, CEO and Managing Director, Sandfire Resources NL
 - Media release, Thomson Resources, 'Further outstanding drill results at Bygoo Tin', dated 28 June 2017
 - Excerpt, Canberra Airport Preliminary Draft 2014 Master Plan, chapter 6: Freight operations
 - o Article, 'International air freight from Canberra primed for take-off', ACT News
 - Canberra Airport, *The Hub*, Issue No. 38, June 2017.
- 13 August 2017 Various emails from Mr Jeff Stien, Senior Economic Development and Tourism Advisor, Bland Shire Council, attaching:
 - o Restart NSW Fund Regional Tourism Infrastructure Fund: Regional Airports Program, Expression of Interest Guidelines: Regional Airports 2014-2015
 - Fact Sheet, 'Improving infrastructure at NSW's regional airports', NSW Department of Industry
 - Document entitled 'Questions and Answers'

- Diagram, 'Funding boost for regional NSW airports', NSW Department of Industry, dated December 2015
- Regional Tourism Infrastructure Program Regional Airports Recommended Shortlist, New South Wales projects by local government area, Attachment A
- Letter, Chair, Newell Highway Promotions Committee to the Minister for Trade, Tourism and Major Events, and Minister for Sport, regarding Restart NSW \$110 million Regional Tourism Infrastructure Fund – Regional Airports Program, dated 17 August 2015
- Document entitled 'Explanation of Intended Effect Amendment to State Environmental Planning Policy No. 64 – Advertising and Signage', NSW Planning and Environment
- Changes to planning rules for outdoor advertising Frequently asked questions, NSW Planning and Environment, May 2017
- Tourist signposting, Destination NSW and Department of Transport: Roads and Maritime Services
- Presentation, 'Regional Growth Environment and Tourism Fund: Briefing for applicants', Infrastructure NSW, dated 16 March 2017
- o Restart NSW: Regional Growth Environment and Tourism, Expression of Interest Guidelines, NSW Department of Industry
- o Regional Growth Environment and Tourism Fund Q&A
- Queensland Drive Tourism Strategy 2013-2015, Queensland Department of Tourism,
 Major Events, Small Business and the Commonwealth Games, dated December 2012
- Caravan Industry Association of Australia, Caravan and camping industry: State of Industry, dated 2017.
- 2 August 2017 email from Ms Kristie Szabo, Executive Officer to Andrew Garth & Centre for Defence Industry Capability to the secretariat, advising that Mr Garth will not be attending the public hearing of 3 August 2017, as he has not received the necessary clearance.
- 2 August 2017 email from Ms Harriet Smith, Manager, Office of the CEO, Newcastle Airport Party Limited to the secretariat, suggesting a meeting with the Committee at its forthcoming visit to the Hunter.

Sent:

- 8 August 2017 letter from the Hon Greg Pearce MLC, Committee Chair advising Mr Philip Donato MP, Member for Orange, that the committee will be visiting the Ex-Services Club, Orange to hold a public hearing.
- 8 August 2017 letter from letter from the Hon Greg Pearce MLC, Committee Chair advising The Hon Katrina Hodgkinson MP, Member for Cootamundra, that the committee will be undertaking site visits in West Wyalong.

5. Inquiries into regional development and a global Sydney, and the defence industry in New South Wales

5.1 Answers to questions on notice

The committee noted that the answers to questions on notice provided by the following witnesses were published by the committee clerk under the authorisation of the resolution appointing the committee:

- Ms Monica Barone, Chief Executive Officer, City of Sydney, received 17 July 2017.
- Professor Valerie Linton and Mr Mark Roberts, University of Wollongong, received 1 August 2017.

• Illawarra Business Chamber, received 8 August 2017, attaching report entitled "Upgrading rail connectivity between Illawarra and Sydney", dated 2 August 2017.

5.2 Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witness was sworn and examined:

 Mr Steven Bowman, Manager, Economic Development, Bathurst Regional Council, and Chair, Evocities

The evidence concluded and witness withdrew.

The following witness was sworn and examined:

• Ms Anna Wyllie, Economic and Business Development Manager, Parkes Shire Council

The evidence concluded and witness withdrew.

The following witnesses were sworn and examined:

- Ms Meredith Macpherson, Centroc Water Utilities Alliance Program Manager, Central NSW Councils (Centroc)
- Councillor Bill West, Centroc Portfolio Chair of Regional Development, Mayor of Cowra Council, Central NSW Councils (Centroc)

The evidence concluded and witnesses withdrew.

The following witness was sworn and examined:

• Mr Jeff Stien, Senior Economic Development & Tourism Advisor, Bland Shire Council, and Chair, Newell Highway Promotions Committee.

Mr Stien tendered the following documents:

- Newell Highway Analytics Report, 1 July 2017 to 31 July 2017
- NSW Freight and Ports Plan, Transport for NSW
- Presentation, 'nbn in Bland Shire', prepared by Jonathan James
- Newell Highway Visitor Guide: More than just a highway
- Letter, Mr GN Davies AO CSC, Air Marshal, Chief of Air Force to Mr Jeff Stien, Bland Shire Council, regarding gliding at West Wyalong, dated 3 November 2015
- Caravan Industry Association of Australia, Caravan and camping industry: State of Industry, dated 2017.

The evidence concluded and witness withdrew.

The following witnesses were sworn and examined:

- Mr Gary Styles, General Manager, Orange City Council
- Ms Kathy Woolley, Director, Corporate and Communication Services, Orange City Council

The evidence concluded and witnesses withdrew.

The following witnesses were sworn and examined:

- Professor Andrew Vann, Vice Chancellor, Charles Sturt University
- Mr Peter Fraser, Director, Government and Community Relations, Charles Sturt University

- Professor Chang-Tsun Li, Professor in Computing, Charles Sturt University
- Professor Terry Bossomaier, Professor of Computer Systems, Charles Sturt University

The evidence concluded and witnesses withdrew.

The public hearing concluded at 3.30 pm.

5.3 Tendered documents

Resolved on the motion of Mr Veitch: That the committee accept and publish the following documents tendered during the public hearing:

- Newell Highway Analytics Report, 1 July 2017 to 31 July 2017
- NSW Freight and Ports Plan, Transport for NSW
- Presentation, 'nbn in Bland Shire', prepared by Jonathan James
- Newell Highway Visitor Guide: More than just a highway
- Letter, Mr GN Davies AO CSC, Air Marshal, Chief of Air Force to Mr J Stien, Bland Shire Council, regarding gliding at West Wyalong, dated 3 November 2015
- Caravan Industry Association of Australia, Caravan and camping industry: State of Industry, dated 2017.

6. Adjournment

The committee adjourned at 3.33 pm until 7:30 am, Tuesday 15 August 2017, Lobby, De Russie Hotel to travel to Orange Regional Airport (regional site visit to West Wyalong).

Jenelle Moore

Committee Clerk

Minutes no. 30

Monday 28 August 2017 Standing Committee on State Development Harvard Room, Tweed Shire Council, Tweed Heads at 9:55 am

1. Members present

Mr Pearce, *Chair*Mr Veitch, *Deputy Chair*Mr Graham
Mr Green
Mrs Maclaren-Jones

2. Apologies

Mr Colless

3. Previous minutes

Resolved on the motion of Mr Green: That draft minutes nos. 28 and 29 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

The committee to note the following items of correspondence received (attached):

- 17 August 2017 Email from Mr Jason Greive, General Manager Operations, Evolution Mining, regarding the committee's visit to the mine
- 22 August 2017 Emails from Mr Jeff Stien, Senior Economic Development and Tourism Advisor, Bland Shire Council, attaching:
 - o Charter, Regional Development Australia, dated August 2017
 - Report of Department of Infrastructure and Regional Development entitled "Independent Review of the Regional Development Australia Programme – Final Report", prepared by the Hon Warwick Smith AM, dated December 2016
 - o Stronger Communities Fund Guidelines
 - o Stronger Communities Fund Factsheet
 - o Table listing councils awarded funding under the Stronger Communities Fund
 - o Spreadsheet listing councils awarded funding under the Stronger Communities Fund

Sent:

The committee to note the following items of correspondence sent (attached):

- 17 August 2017 Letter from Chair to Mr Jeff Stien, Bland Shire Council, to thank him for hosting the committee's visit on 15 August 2017
- 17 August 2017 Letter from Chair to Ms Sarah Roche, Graincorp, to thank her for hosting the committee's visit on 15 August 2017
- 17 August 2017 Letter from Chair to Mr Jason Greive, Evolution Mining, to thank him for hosting the committee's visit on 15 August 2017
- 17 August 2017 Letter from Chair to Mr Mal Carnegie, Lake Cowal Foundation, to thank him for hosting the committee's visit on 15 August 2017
- 23 August 2017 Letter from Chair to Mr Geoff Provest MP, Member for the Tweed, advising of the upcoming committee visit to his electorate.
- 23 August 2017 Letter from Chair to the Hon Adam Marshall MP, Member for the Northern Tablelands, advising of the upcoming committee visit to his electorate.

5. Inquiries into regional development and a global Sydney, and the defence industry in New South Wales

5.1 Submissions

Defence industry inquiry:

The committee noted that the following submissions were published by the committee clerk under the authorisation of an earlier resolution: submission nos. 33 and 34.

Regional development and a global Sydney inquiry:

The committee noted that the following submission was published by the committee clerk under the authorisation of an earlier resolution: submission no. 37.

5.2 Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witness was sworn and examined:

• Mr Troy Green, General Manager, Tweed Shire Council.

The evidence concluded and the witness withdrew.

The following witnesses were sworn and examined:

- Mr Des Schroder, Director Environment, Planning and Community, Clarence Valley Council
- Mr Ross Roberts, Managing Director, Harwood Marine.

The evidence concluded and witness withdrew.

The following witness was sworn and examined:

• Mr Craig Jenkins, Business Development Manager, Office of Regional Development, Department of Premier and Cabinet.

The evidence concluded and the witness withdrew.

The public hearing concluded at 11:50 am.

5.3 Tendered documents

Resolved, on the motion of Mr Veitch: That the committee accept and publish the following documents tendered by Mr Jeff Stien, Bland Shire Council during the committee's site visit to West Wyalong on 15 August 2017:

- Presentation, 'Inland Rail Bland Council Briefing', ARTC, 1 August 2017
- Media release, Argent Minerals Limited, 'Copper and gold in West Wyalong Porphyry final assays', dated 27 July 2017
- Map, grain and mining sites in the West Wyalong region
- Article, 'Getting down to business with Council', West Wyalong Advocate, 10 June 2015
- Article, 'Council committed to driving local business', West Wyalong Advocate, 7 June 2016
- Article, 'Whispering Pines making a noise in business awards', no citation provided
- Article, '\$9m refurbishment set to provide world-class care', West Wyalong Advocate, 12 January 2016
- Letter, Exploration Manager Regional, Sandfire Resources NL, to LEK Consulting and the NSW Department of Industry, regarding NSW Regional Economic Opportunities and Infrastructure Priorities, Department of Industry Consultation, dated 9 August 2016.

Resolved, on the motion of Mrs Maclaren-Jones: That the committee accept and publish the following document tendered by Mr Jason Greive, Evolution Mining during the committee's site visit to West Wyalong on 15 August 2017:

• Evolution Mining Cowal Site Visit, 15 August 2017.

5.4 Site visit

Committee members travelled to a local business, Potager Restaurant, Carool and met with the following representative to discuss challenges facing small businesses in setting up in regional New South Wales:

• Mr Peter Burr, Owner, Potager Restaurant.

6. Adjournment

The committee adjourned at 3.00 pm until 8.50 am, Tuesday 29 August 2017, Armidale Regional Council Chambers (public hearing).

Stephanie Galbraith

Committee Clerk

Minutes no. 31

Tuesday 29 August 2017 Standing Committee on State Development Armidale Regional Council Chambers, Armidale at 9:03 am.

1. Members present

Mr Pearce, *Chair*Mr Veitch, *Deputy Chair*Mr Graham
Mr Green
Mrs Maclaren-Jones

2. Apologies

Mr Colless

3. Inquiries into regional development and a global Sydney, and the defence industry in New South Wales

3.1 Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Peter Dennis, Chief Executive Officer, Armidale Regional Council
- Mr Lindsay Woodland, Group Leader, Organisational Services.

Mr Woodland tendered the following documents:

- Armidale Regional Council, Presentation to Standing Committee on State Development, Tuesday 29
 August 2017
- Armidale Regional Council, Regional Infrastructure Priorities to grow Armidale to 100K population

The evidence concluded and witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Ian Smith, Director of Regional Operations, Office of Regional Development, Department of Premier and Cabinet
- Mr Peter Sniekers, Business Development Manager New England, Office of Regional Development, Department of Premier and Cabinet.

The evidence concluded and witness withdrew.

The following witnesses were sworn and examined:

- Dr Greg Winslett, Director, Teaching and Learning Support, University of New England
- Professor Neil Argent, Professor of Human Geography, University of New England
- Mr Paul McFarland, Lecturer, School of Behavioural, Cognitive and Social Sciences, University of New England.

The evidence concluded and witnesses withdrew.

The public hearing concluded at 11:15 am.

3.2 Tendered documents

Resolved on the motion of Mr Veitch: That the committee accept and publish the following documents tendered during the public hearing:

- Armidale Regional Council, Presentation to Standing Committee on State Development, Tuesday 29 August 2017, tendered by Mr Lindsay Woodland
- Armidale Regional Council, Regional Infrastructure Priorities to grow Armidale to 100K population, tendered by Mr Lindsay Woodland.

3.3 Site visit – Smart farm, University of New England, Armidale

The committee travelled to the University of New England's Smart farm in Armidale and met with the following representatives:

- Professor David Lamb, McClymont Distinguished Professor (Research), Precision Agriculture Research Group, University of New England
- Ms Sarah Burrows, Protocol Officer, University of New England.

4. Adjournment

The committee adjourned at 4.10 pm until Monday 18 September 2017 (Public hearing and site visit to the Hunter region for the defence industry inquiry).

Jenelle Moore

Committee Clerk

Minutes no. 32

Monday 18 September 2017 Standing Committee on State Development Seaview Room, Harbourview Function Centre, Newcastle at 10:00 am

1. Members present

Mr Pearce, Chair

Mr Veitch, Deputy Chair

Mr Colless

Mr Graham

Mr Green

Mrs Maclaren-Jones

Mr Macdonald (participating)

2. Previous minutes

Resolved on the motion of Mr Veitch: That draft minutes nos. 30 and 31 be confirmed.

3. Correspondence

The committee noted the following items of correspondence:

Received:

The committee to note the following items of correspondence received:

- 18 September 2017 email from Ms Susan Wilson, Chief Executive, Regional Development Australia, Hunter to secretariat, providing her apologies for the hearing of 18 September 2017
- 14 September 2017 email from Mr Jamie Haynes, Deputy Director Ministerials, Royal Australian Airforce, to secretariat, regarding proposed visit to the RAAF Williamtown Base.

Sent:

The committee to note the following items of correspondence sent:

- 12 September 2017 letter from Chair to Mr Tim Crakanthorp MP, Member for Newcastle, advising that the committee will be visiting Newcastle to hold a public hearing
- 12 September 2017 letter from Chair to Ms Kate Washington MP, Member for Port Stephens, advising that the committee will be visiting Williamtown for a site visit.

4. Inquiries into regional development and a global Sydney, and the defence industry in New South Wales

4.1 Answers to questions on notice

The committee noted that the following answers to questions on notice provided by the following witnesses were published by the committee clerk under the authorisation of the resolution appointing the committee:

- ACT Government, received 11 August 2017 (Defence)
- Defence NSW, received 1 September 2017 (Defence)
- Bathurst Regional Council, received 6 September 2017 (Regional development)
- Charles Sturt University, received 11 September 2017 (Defence)
- Parkes Council, received 11 September 2017 (Regional development)
- Department of Defence, received 21 August and 11 September 2017 (Defence)

4.2 Submission – Defence inquiry

The committee noted that the following submission was published by the committee clerk under the authorisation of an earlier resolution: submission no. 35.

4.3 Public hearing – Defence inquiry

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Richard Anicich, Director, Hunter Business Chamber
- Mr Tony Cade, Chief Executive Officer, HunterNet
- Mr Greg Fenwick, Economic Development Facilitator, Newcastle City Council
- Ms Jill Gaynor, Manager Strategic Planning, Newcastle City Council.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Peter Gesling, Chair, Newcastle City Airport
- Mr Peter Cock, Chief Executive Officer, Newcastle City Airport
- Mr James Garvey, Director, 2JC Party Limited and Director, Williamtown Aerospace Centre.

Mr Cock tendered the following documents:

Map outlining proposed expansion land at Newcastle Airport.

Mr Garvey tendered the following documents:

 Williamtown Aerospace Centre marketing materials including map outlining proposed industrial road and second access to BAE Precinct and Airport.

The evidence concluded and the witnesses withdrew.

The public hearing concluded at 11:34 am.

4.4 Tendered documents

Resolved, on the motion of Mr Veitch: That the committee accept and publish the following documents tendered during the public hearing:

- Map outlining proposed expansion land at Newcastle Airport, tendered by Mr Cock
- Williamtown Aerospace Centre marketing materials including map outlining proposed industrial road and second access to BAE Precinct and Airport, tendered by Mr Garvey.

4.5 Site visits – Port of Newcastle and Williamtown Aerospace Centre

Committee members travelled to Thales Australia, Port of Newcastle, and met with the following representatives:

- Mr Greg Kocher, Project Manager, Maritime/Ship Repair, Thales Australia
- Ms Sarah Yuen, MHC Program Manager, Thales Australia
- Mr Richard Anicich, Director, Hunter Business Chamber.

Committee members travelled to the Defence Security Aerospace 18 Hub at the Williamtown Aerospace Centre, and met with the following representatives:

- Professor Deb Hodgson, Pro-Vice Chancellor, Research and Innovation, University of Newcastle
- Ms Micky Pinkerton, Manager, Entrepreneurship and I2N, University of Newcastle
- Mr James Garvey, Director, Williamtown Aerospace Centre.

Committee members travelled to Dexata, Williamtown Aerospace Centre, and met with the following representatives:

- Mr Mike McMahon, Chief Executive, Dexata
- Mr David Jarret, Product Manager, Air Battle Management, Dexata
- Mr James Garvey, Director, Williamtown Aerospace Centre.

Committee members travelled to Bohemia Interactive Simulations, Williamtown Aerospace Centre, and met with the following representatives:

- Mr Ryan Stephenson, Managing Director
- Mr James Garvey, Director, Williamtown Aerospace Centre.

Committee members travelled to BAE Systems, Williamtown Aerospace Centre, and met with the following representatives:

• Mr Andrew Chapman, F35 Campaign Manager, BAE Systems

• Mr Darren Shaw, F35 Project Manager, BAE Systems.

5. Adjournment

The committee adjourned at 4.10 pm until 7:00 am, Tuesday 24 October 2017, Sydney Airport (regional site visit and public hearing in Queanbeyan and Adelaide)

Stephanie Galbraith

Committee Clerk

Minutes no. 33

Tuesday 24 October 2017 Standing Committee on State Development Farrer Room, Best Western Central Motel, Queanbeyan, at 10.00 am

1. Members present

Mr Pearce, Chair

Mr Graham

Mr Green

Mr Wang (substituting for Mrs Maclaren-Jones)

2. Apologies

Mr Colless

Mrs Maclaren-Jones

Mr Veitch

3. Previous minutes

Resolved on the motion of Mr Green: That draft minutes no. 32 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

• 21 August 2017 – Letter from Mr Matt Ramage, Assistant Secretary Defence Industry, Department of Defence to Chair, seeking to correct evidence given at public hearing of 3 August 2017.

Sent:

- 3 October 2017 Letter from Chair to Professor Deb Hodgson, University of Newcastle thanking her for hosting a visit on 18 September 2017
- 3 October 2017 Letter from Chair to Mr Ryan Stephenson, Bohemia Interactive Simulations, thanking him for hosting a visit on 18 September 2017
- 3 October 2017 Letter from Chair to Mr Mike McMahon, Dexata, thanking him for hosting a visit on 18 September 2017
- 3 October 2017 Letter from Chair to Mr Andrew Chapman, BAE Systems Australia, thanking him for hosting a visit on 18 September 2017
- 3 October 2017 Letter from Chair to Mr Greg Gocher, Thales Australia, thanking him for hosting a visit on 18 September 2017.

5. Inquiries into the defence industry in New South Wales, and regional development and a global Sydney

5.1 Answers to questions on notice

The committee noted that the following answers to questions on notice provided by the following witnesses were published by the committee clerk under the authorisation of the resolution appointing the committee:

- Bland Shire Council, received 24 August 2017
- Central NSW Councils, received 12 September 2017
- University of New England, received 20 September 2017.
- Department of Premier and Cabinet, received 3 October 2017
- Department of Premier and Cabinet, received 4 October 2017
- Department of Defence, received 11 October 2017.

5.2 Correction to transcript

Resolved, on the motion of Mr Graham: That the committee authorise the publication of correspondence from Mr Ramage, Department of Defence, received 21 August 2017, and that this correspondence be noted in the footnote of the transcript of 3 August 2017.

5.3 Public hearing

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Stuart Althaus, Chief Executive Officer, SME Gateway
- Mr Robert Boz, Managing Director, Meccanica

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Mr Warren Williams, Managing Director, Codarra Advanced Systems
- Dr Ben Greene, Chief Executive Officer, Electro Optic Systems
- Mr Steve Bowden, Director, Spearpoint

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Ms Nicole Pearson, General Manager, Regional Economic Development and Strategic Policy, Department of Infrastructure and Regional Development
- Ms Ruth Wall, General Manager, Regional Programs, Department of Infrastructure and Regional Development.

The public hearing concluded at 11:51 am.

5.4 Site visit to Electro Optic Systems

Committee members travelled to the Electro Optic Systems, Mount Stromlo Observatory facility and met with the following representatives:

- Dr Ben Greene, Chief Executive Officer, Electro Optic Systems
- Dr James Bennett, RP3 Program Leader, Space Environment Research Centre.

5.5 Briefing with Department of Defence

Committee members were briefed by officials from the Department of Defence on Defence procurement issues and ways in which the Department engages with the defence industry. The committee met with the following representatives:

- Dr Andrew Jacopino, Assistant Secretary Supplier Analysis and Engagement, Capability Acquisition and Sustainment Group
- Mr Matt Ramage, Assistant Secretary Industry Policy
- Mr Michael Frith, Acting Assistant Secretary, Material Procurement Branch, Capability Acquisition and Sustainment Group.

6. Adjournment

The committee adjourned at 4:30 pm until 9:00 am, Wednesday 24 October 2017, Lobby, Majestic Roof Hotel, Adelaide (Site visit to ASC, Adelaide).

Stephanie Galbraith

Committee Clerk

Minutes no. 34

Wednesday 25 October 2017 Standing Committee on State Development Lobby, Majestic Roof Garden Hotel, Adelaide, 9:00 am

1. Members present

Mr Pearce, Chair

Mr Graham

Mr Green

Mr Wang (substituting for Mrs Maclaren-Jones)

2. Apologies

Mr Colless

Mrs Maclaren-Jones

Mr Veitch

3. Inquiry into the defence industry in New South Wales – Site visit to ASC, Adelaide

Committee members travelled to ASC, Osborne Naval Shipyard, Adelaide and received briefings on and tours of ASC North (Submarine construction and maintenance) and ASC South (Shipbuilding) facilities.

The committee met with the following representatives from ASC Party Ltd:

- Mr Stuart Whiley, Interim Chief Executive Officer
- Mr Martin Edwards, General Manager Submarine Capability Development
- Mr Colin Loudon, Production Manager
- Mr Schemko Bialek, Project Manager, Air Warfare Destroyer
- Ms Haley McDonald, Senior Communications Manager.

4. Adjournment

The committee adjourned at 2:00 pm until Monday 13 November 2017, Parliament House (Deliberative meeting for draft discussion papers).

Stephanie Galbraith

Committee Clerk

Minutes no. 35

Thursday 13 November 2017 Standing Committee on State Development Room 1136, Parliament House, Macquarie Street, Sydney, 12.00 pm

1. Members present

Mr Pearce, *Chair*Mr Veitch, *Deputy Chair*Mr Colless
Mr Green
Mrs Maclaren-Jones

2. Apologies

Mr Graham

3. Draft minutes

Resolved, on the motion of Mr Green: That draft minutes nos. 33 and 34 be confirmed.

4. Correspondence

The committee noted the following items of correspondence:

Received:

• 26 October 2017 – Email from Mr Robert Boz, Managing Director, Meccanica, suggesting the establishment of a local defence industry forum.

Sent:

- 8 November 2017 Letter from Chair to Dr Ben Greene, Chief Executive Officer, Electro Optic Systems, thanking him for hosting a visit on the 24 October 2017
- 8 November 2017 Letter from Chair to Mr Stuart Whiley, Interim Chief Executive Officer, ASC Party Ltd, thanking him for hosting a visit on 25 October 2017.

5. Inquiries into the defence industry in New South Wales and regional development and a global Sydney

5.1 Answers to questions on notice

The committee noted that the following answers to questions on notice provided by the following witnesses were published by the committee clerk under the authorisation of the resolution appointing the committee:

• Department of Defence, received 25 October 2017.

5.2 Site visit report

The Chair submitted site visit reports on the committee's visits to Nowra and Wollongong; West Wyalong; Tweed Heads and Armidale; The Hunter; and Canberra and Adelaide, which, having been previously circulated, were taken as being read.

Resolved, on the motion of Mr Veitch: That the committee accept and publish the following site visit reports relating to the committee's inquiries into the defence industry in New South Wales, and regional development and a global Sydney:

- a) Report for the Nowra and Wollongong site visits on 30 June 2017
- b) Report for West Wyalong site visits on 15 August 2017
- c) Report for the Tweed Heads and Armidale site visits on 28-29 August 2017
- d) Report for the Hunter site visits on 18 September 2017
- e) Report for the Canberra and Adelaide site visits on 24-25 October 2017.

5.3 Consideration of Chair's draft discussion paper – Defence industry in New South Wales

The Chair submitted his draft discussion paper entitled *Defence industry in New South Wales*, which, having been previously circulated, was taken as being read.

Resolved, on the motion of Mr Veitch:

a) That the following new paragraphs and question be inserted after Question 8:

'Collaboration with the ACT

The importance of interjurisdictional collaboration in promoting the defence industry was raised by both the defence industry advocates of New South Wales and the ACT.

Ms Kate Lundy, Defence Industry Advocate for the ACT Government explained that collaborative arrangements between New South Wales and ACT were formalised, to ensure that both jurisdictions could work 'interchangeably' to represent industry based in the border areas:

The ACT sits, of course, within the south-east of New South Wales. One of the key points the Chief Minister made on my appointment is that he did not want to have a visible border...between the ACT and the surrounding New South Wales region. Rather, he wanted me to approach my work as Defence Industry Advocate looking at the whole region as an economic region and to collaborate strongly with New South Wales, particularly with the...New South Wales Defence Industry Advocate, John Harvey. This was formalised, in an agreement using the cross-border forum that simply said we will collaborate to promote the defence industry in this region.

That allowed our respective industry departments...economic development in the ACT Government and New South Wales industry as expressed in those cross-border arrangements, to have a level of collaboration that allows us to work interchangeably when representing and taking the interests of the companies in our region forward. For example, there are companies in Queanbeyan that we are really inclusive of in all of our initiatives. We try to understand their issues and their challenges. Equally, I know Mr Harvey is quite conversant with some of the challenges facing companies that operate either really close to the border or in the ACT. We share knowledge and understanding about what those challenges are and work really closely in accessing some of the services and support..' [FOOTNOTE, Ms Kate Lundy, Defence Industry Advocate, Australian Government, 3 August 2017, p 22]

Question X

Are there any additional steps that the NSW Government and ACT Government can take to enhance collaborative working arrangements for the benefit of defence industry?'

b) That the following new paragraphs and question be inserted after Question 16:

'The space industry

In September 2017 the Federal Government announced its intention to establish an Australian space agency. The agency will be responsible for providing international representation, supporting critical partnerships, and coordinating national strategies and activities to support industry growth. A review of Australia's space industry capability is being led by an Expert Reference Group. It is expected that a final report, including a charter for the space agency, will be delivered to the Australian Government in March 2018.²⁴⁷ [FOOTNOTE: Australian Government, Department of Industry, Innovation and Science, Review of Australia's Space Industry Capability, https://industry.gov.au/industry/IndustrySectors/space/Pages/Review-of-Australian-Space-Industry-Capability.aspx.]

The application of an Australian space program has both civilian and defence implications and a number of inquiry stakeholders identified the opportunities emerging for industry as a result of government action in this area. For example, Dr Greene, Chief Executive Officer of Electro Optic System, reflected on the potential for Australia to increase its focus on space related capabilities, advising:

We have a very good platform of expertise in this country now and we are quite intelligent users of space. It is time we started to be more intelligent exploiters, in our own right, of space.

In civil space I think there is huge potential for us to do more of what we are doing. ... In military space it is a bit more difficult because those programs are all siloed within each country, but we have significant military activities in space in four countries now and we have all the appropriate clearances and so on to do that. [FOOTNOTE: Evidence, Dr Ben Greene, Chief Executive Officer, Electro Optic Systems, 24 October 2017, p 11]

Mr Robert Boz, Managing Director, Meccanica, a SME based in Queanbeyan, also advised the committee that opportunities existed on account of the developing space sector. Mr Boz explained:

Meccanica provides an engineering consultancy and precision machining services to Defence itself, our local Defence contractors, and the developing space sector that is being developed at the University of New South Wales Australian Defence Force Academy [ADFA]. In that case, we are the preferred supplier to the CubeSat program that is developing there and we see a lot of opportunity both in the space and Defence sectors. [FOOTNOTE: Mr Robert Boz, Managing Director, Meccanica, p 2]

Australian Government, Department of Industry, Innovation and Science, Review of Australia's Space Industry Capability, https://industry.gov.au/industry/IndustrySectors/space/Pages/Review-of-Australian-Space-Industry-Capability.aspx.

The committee invites further submissions on the space industry and its potential application for defence industry in New South Wales. In particular, it seeks submission on what steps the NSW Government can take to ensure that opportunities emerging from investment by the Federal Government are maximised for New South Wales based SMEs and academic institutions.

Question X

What steps can the NSW Government take to support New South Wales defence industry, and academic institutions tap into the opportunities created from Federal Government investment in a national space agency?'

Resolved, on the motion of Mr Green: That:

- a) the draft discussion paper, as amended, be adopted by the committee and published in accordance with standing order 226(4) on 13 November 2017
- b) following publication, the discussion paper be sent to inquiry participants and interested parties with a letter inviting submissions on the paper
- c) the Chair table the discussion paper in the House on 14 November 2017
- d) the committee secretariat correct any typographical, grammatical and formatting errors.

5.4 Consideration of Chair's draft discussion paper - Regional development and a global Sydney

The Chair submitted his draft discussion paper entitled Regional development and a global Sydney, which, having been previously circulated, was taken as being read.

Resolved, on the motion of Mr Veitch:

- a) That the following words be inserted at the end of paragraph 1.23:
 - 'However, these aggregate figures are heavily influenced by the impact of the mining construction boom.'
- b) That the following new paragraph be inserted after paragraph 1.23:
 - 'Figures that have recently been reported from the latest census show that in the five years between 2011 and 2016, 342,000 jobs have been created in Sydney, while outside Sydney the number of jobs has decreased by 17,000. In response the NSW Government has quoted the Bureau of Statistics' labour force survey which shows 'more than 90,000 jobs' added in the state's regional areas between September 2011 and September 2017. These competing figures illustrate the need for better and more frequent reporting of regional economic data. While these economic statistics are produced at a national level, they have an important impact on the NSW Government's ability to drive its regional development agenda.
 - http://www.smh.com.au/business/the-economy/sydney-jobs-boom-puts-[FOOTNOTE: pressure-on-transport-and-house-prices-20171108-gzhitj.html]
- c) That the following new question be inserted before paragraph 1.24:

'Question 1

What additional statistical information would be useful to determine how regional New South Wales is fairing economically on a more frequent and more detailed basis?'.

d) That the following new paragraphs and question be inserted after Question 24:

'Accessing finance

The committee is cognisant that access to finance can be a significant barrier for smaller SMEs or startups. While the committee will discuss this issue further in its discussion paper on the defence industry in New South Wales, the committee takes this opportunity to acknowledge the difficulties faced by SMEs in the face of reluctance from banks to lend them sufficient capital to fund their new enterprises, possibility on account of a limited understanding of new and emerging areas of industry, particularly with regard to defence. This can make it difficult for SMEs to secure the necessary funding to attract or deliver larger, more valuable contracts.

The committee seeks further submissions on what appropriate steps should be taken by the NSW Government to assist SMEs and startups to secure the necessary finance to innovate, expand their businesses and attract large contracts, particularly where those new industries and contracts can facilitate relocation of business to the regions and fuel regional economies.

Question

How can the NSW Government assist SMEs and startups to secure the necessary finance to innovate, expand their businesses and attract large contracts, particularly where those new opportunities can facilitate relocation of business to the regions and fuel regional economies?'

- e) That paragraph 5.87 be amended by omitting 'insurmountable commuting distances' and inserting instead 'insurmountable commuting distances; and restricting opportunities for education or employment'.
- f) That the following questions be inserted after Question 33:
 - What is the impact of rising housing costs in global Sydney on nearby regional areas?

What opportunities and issues do rising housing costs create for regional areas across New South Wales?'

Resolved, on the motion of Mr Veitch: That:

- a) the draft discussion paper, as amended, be adopted by the committee and published in accordance with standing order 226(4) on 13 November 2017
- b) following publication, the discussion paper be sent to inquiry participants and interested parties with a letter inviting submissions on the paper
- c) the Chair table the discussion paper in the House on 14 November 2017
- d) the committee secretariat correct any typographical, grammatical and formatting errors.

Resolved, on the motion of Mr Veitch: That submissions to both the discussion papers close on Monday 12 February 2018.

Resolved, on the motion of Mrs Maclaren-Jones: That the committee extend its thanks to the secretariat for its work in the preparation of both discussion papers.

Resolved, on the motion of Mr Colless: That the committee extend its congratulations and appreciation to the Chair on his chairmanship of the committee.

6. Adjournment

The committee adjourned at 12.34 pm, sine die.

Jenelle Moore

Committee Clerk

Minutes no. 36

Wednesday 7 March 2018 Standing Committee on State Development Room 1043, Parliament House, Macquarie Street, Sydney, 2.00pm

1. Members present

Mr Martin, *Chair*Mr Veitch, *Deputy Chair*Mr Graham
Mr Green
Mrs Maclaren-Jones

2. Apologies

Mr Colless

3. Committee membership

The committee noted that the Hon Taylor Martin MLC replaced the Hon Greg Pearce MLC as Chair from 13 February 2018.

The committee to note that the Hon Taylor Martin MLC replaced the Hon Natalie Ward MLC as a member of the committee on 13 February 2018. Ms Ward had served since 30 November 2017.

4. Previous minutes

Resolved, on the motion of Mr Green that draft minutes nos.35 be confirmed.

5. Correspondence

The committee noted the following items of correspondence:

Received:

- 24 October 2017 Letter from the Hon Martin Hamilton-Smith MP, Minister for Defence and Space Industries, Government of South Australia, to Chair noting the committee's site visit to Adelaide
- 20 November 2017 Email from Mr Harry Baxter, Defence Materials Technology Centre Ltd, to committee advising of best practice STEM and capacity-building program case studies
- 12 February 2018 Email from Ms Angela Petty, Communications and Coordination Officer, Centre for Defence Industry Capability (CDIC), advising that the CDIC does not intend to make a formal submission in response to the discussion paper.

Sent:

- 20 October 2017 Chair to Senator the Hon Marise Payne, Minister for Defence, Australian Government, advising of committee's visit to Canberra and Adelaide
- 20 October 2017 Chair to the Hon Christopher Minister Pyne MP, Minister for Defence Industry, Australian Government, advising of committee's visit to Canberra and Adelaide
- 20 October 2017 Chair to the Hon Martin Hamilton-Smith MP, Minister for Defence and Space Industries, Government of South Australia
- 20 October 2017 Chair to the Hon John Barilaro MP, Member for Monaro, advising of committee's public hearing in Queanbeyan.

6. Inquiries into Regional development and a global Sydney, and the Defence Industry in New South Wales

6.1 Answers to questions on notice

The committee noted that the following answers to questions on notice provided by the following witnesses were published by the committee clerk under the authorisation of the resolution appointing the committee:

- Department of Defence, received 25 October 2017
- Newcastle City Airport, received on 10 October 2017
- Clarence Valley Council, received 13 September 2017
- Chris Williams, Sydney Aerospace and Defence Interest Group, received 8 August 2017
- Commonwealth Department of Infrastructure and Regional Development, received 20 November 2017
- Hunter Business Chamber, received 21 November 2017.

6.2 Submissions to the discussion papers

6.2.1 Regional development and a global Sydney

The committee noted that the following submissions to the discussion paper were published by the committee clerk under the authorisation of an earlier resolution: submission nos. 1a, 7a, 9a, 13a, 20a, 29a, 30a, 37a.

6.2.2 Defence Industry in New South Wales

The committee noted that the following submissions were published by the committee clerk under the authorisation of an earlier resolution: submission nos. 5a, 6a, 13a,14a, 14a, 15a, 16a, 18a, 19a, 21a, 25a, 26a, 37-40.

6.3 Reporting deadline for Regional Development and a global Sydney inquiry

Resolved, on the motion of Mr Veitch: That the committee extend the reporting date of the inquiry into regional development and a global Sydney to by 7 June 2018 and that the secretariat writes to the Minister advising of this change

7. Adjournment

The committee adjourned at 2.01pm, until Tuesday 27 March 2018, Jubilee Room, Parliament House (Regional development and a global Sydney inquiry public hearing).

Stephanie Galbraith Committee Clerk

Minutes no. 38

Wednesday 4 April 2018 Standing Committee on State Development Macquarie Room, Parliament House, 9.30 am

1. Members present

Mr Martin, *Chair* Mr Veitch, *Deputy Chair* Mr Graham

Mr Green Mrs Maclaren-Jones

2. **Apologies**

Mr Colless

3. **Previous minutes**

Resolved, on the motion of Mr Green: That draft minutes no. 37 be confirmed.

4. Correspondence

The Committee noted the following items of correspondence:

Received:

- 23 March 2018 Email from Ms Carlita Warren, Senior Manager, Policy and Research, NRMA to secretariat, advising it is unable to attend the roundtable on 27 March 2018 for regional development and a global Sydney
- 23 March 2018 Email from Ms Jane Lambert, Program Leader, Strategy, City and Community Outcomes, Blue Mountains City Council to secretariat, advising it is unable to attend the roundtable on 27 March 2018 for regional development and a global Sydney
- 23 March 2018 Email from Ms Kelly Goodwin, Director Corporate Communications, Infrastructure NSW to secretariat, declining the invitation to appear at the roundtable on 27 March 2018 for regional development and a global Sydney
- 26 March 2018 Email from Ms Kate Aubrey-Poiner, Manager, Strategy and Policy, NSW Aboriginal Land Council to secretariat, advising it is unable to attend the roundtable on 27 March 2018 for regional development and a global Sydney.

5. Report deliberative date for State Development Committee inquiries

Resolved, on the motion of Mr Veitch: That the committee hold its report deliberative meeting for its inquiries into the Defence industry in New South Wales, and Regional development and a global Sydney on Friday 1 June 2018, and that consideration of the Chair's draft report into the Defence industry in New South Wales take place first.

6. Inquiry into the Defence industry in NSW

6.1 Public submissions

Resolved, on the motion of Mr Graham: That submission no.38 as published be withdrawn and replaced with an updated version, as per request of the author, as the original version contained formatting errors resulting from corrupt images.

6.2 Public roundtable

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were examined on their former oath:

- Commodore Peter Scott CSC, RANR, Director, Defence NSW
- Mr Duncan Challen, Executive Director, Industry Development, NSW Department of Industry
- Mr Chris Williams, Executive Chair, Sydney Aerospace & Defence Interest Group, and member of Centre for Defence Industry Capability Advisory Board.

The following witnesses were sworn and examined:

- Ms Anna Murray, NSW Vice-president, Australian Industry & Defence Network
- Ms Evelyn Nordhoff, Defence Industry Facilitator New South Wales, Centre for Defence Industry Capability
- Mr Trent Goldsack, Business Advisor, Centre for Defence Industry Capability
- Mr Stewart Noel, Sydney Aerospace & Defence Interest Group
- Ms Therese O'Dwyer, Acting Executive Officer, Regional Development Australia, Sydney.

The evidence concluded and the witnesses withdrew.

The following witnesses were examined on their former oath:

- Air Marshall (Ret) John Harvey AM, NSW Defence Advocate
- Mr Laurie Koster, Chairperson, Shoalhaven Defence Industry Group.

The following witnesses were sworn and examined:

- Mr Mark Goodsell, Head New South Wales, Australian Industry Group
- Mr Bob Hawes, Chief Executive Officer, Hunter Business Chamber.

The evidence concluded and the witnesses withdrew.

The following witnesses were examined on their former oath:

- Commodore Peter Scott CSC, RANR, Director, Defence NSW
- Air Marshall (Ret) John Harvey AM, NSW Defence Advocate
- Ms Therese O'Dwyer, Acting Executive Officer, Regional Development Australia, Sydney.

The following witnesses were sworn and examined:

- Dr Chris Armstrong, Acting/NSW Chief Scientist and Engineer
- Professor Bradley Williams, Director, Defence Innovation Network; Professor of Chemistry, University of Technology Sydney
- Professor Iver Cairns, Professor in Space Physics, University of Sydney; Director, SpaceNet;
 Director of the ARC Training Centre for CubeSats, UAVs and Their Applications
- Professor Andrew Dempster, Director, Australian Centre for Space Engineering Research, University of New South Wales
- Dr Gregor Ferguson, Chair Innovation Sub Committee, Sydney Aerospace & Defence Interest Group.

Professor Cairns tendered the following document:

• Statement to the Standing Committee on State Development concerning the defence and space industries in New South Wales, 4 April 2018.

The evidence concluded and the witnesses withdrew.

The public roundtable concluded at 3.17 pm

The public and media withdrew.

6.3 Tendered documents

Resolved, on the motion of Mr Green: That the committee accept and publish the following document tendered during the hearing:

 Statement to the Standing Committee on State Development concerning the defence and space industries in New South Wales, 4 April 2018, tendered by Professor Iver Cairns in Space Physics, University of Sydney; Director, SpaceNet; Director of the ARC Training Centre for CubeSats, UAVs and their Applications.

7. Adjournment

The committee adjourned at 3.22 pm until Friday 1 June 2018, Room 1254, Parliament House (Report deliberative meeting for the inquiries into the Defence industry in New South Wales, and Regional development and a global Sydney).

Stephanie Galbraith

Clerk to the Committee

Draft minutes no. 40

Friday 1 June 2018 Standing Committee on State Development Room 1254, Parliament House, 9.06 am

1. Members present

Mr Martin, Chair

Mr Veitch, Deputy Chair

Mr Colless

Mr Graham

Mr Green

Mrs Maclaren-Jones

2. Previous minutes

Resolved, on the motion of Mr Veitch: That draft minutes no. 39 be confirmed.

3. Inquiry into regional development and a global Sydney

3.1 Correspondence

The committee noted the following items of correspondence:

Received:

- 20 April 2018 Letter from NSW Aboriginal Land Council to committee, providing written responses to discussion points from the inquiry into regional development and a global Sydney roundtable
- 22 May 2018 Email from Ms Jenny Bennett, Executive Officer, Central NSW Councils to secretariat, advising that answers to questions on notice regarding discussion with local business chambers are still a work in progress
- 23 May 2018 Email from the office of Ms Dawn Walker MLC to secretariat, advising that Ms Walker wishes to be a participating member of the inquiry into the Provisions of the Forestry Legislation Amendment Bill 2018

Sent:

15 May 2018 – Email from secretariat to Ms Jenny Bennett, Executive Officer, Central NSW Councils, regarding the expected return of answers to questions on notice for the inquiry into regional development and a global Sydney roundtable (the QONs have not been received with the due date being 24 April 2018).

Resolved, on the motion of Mr Veitch: That the committee authorise the publication of correspondence from the NSW Aboriginal Land Council, providing written responses to

discussion points from the inquiry into regional development and a global Sydney roundtable, received on 20 April 2018.

Resolved, on the motion of Mr Colless: That the committee authorise:

- the secretariat to write to the Department of Premier and Cabinet to ascertain information on that department's recent restructure and how it will be supporting the future development of community strategic plans
- the publication of any correspondence received from the Department of Premier and Cabinet regarding its recent restructure and support for the future development of community strategic plans.

3.2 Answers to questions on notice

The committee noted that the following answers to questions on notice were published by the committee clerk under the authorisation of the resolution appointing the committee:

- NSW Business Chamber, received on 11 April 2018
- Mr Stewart Webster, Acting Executive Director, Regional Policy and Analytics, Regional NSW Group, Department of Premier and Cabinet, received on 18 April 2018
- Albury City Council, received on 17 April 2018
- Mr Brett Whitworth, Executive Director, Strategic Planning and Programs, Department of Planning and Environment, received on 23 April 2018
- NCOSS, received 24 April 2018
- Central NSW Councils, Part one, received 4 May 2018
- Central NSW Councils, Part two, received 8 May 2018.

Resolved, on the motion of Mr Colless: That the committee keep confidential answers to questions on notice received from Albury City Council on 17 April 2018, and Central NSW Councils Part two received on 8 May 2018, as per the request of the author.

3.3 Consideration of Chair's draft report entitled 'Regional development and a global Sydney'

The Chair submitted his draft report entitled Regional development and a global Sydney, which, having been previously circulated, was taken as being read.

Resolved, on the motion of Mr Graham: That the following new paragraph be inserted after paragraph 1.21:

'In comparison, the Gross State Product for New South Wales since 2006 has increased on average by 2.2 per cent.' [FOOTNOTE: Australian Bureau of Statistics, 5220.0 - Australian National Accounts: State Accounts, 2015-16, Analysis of results Growth in GSP volume measures,

http://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/5220.0Main%20Features22 015- 16?opendocument&tabname=Summary&prodno=5220.0&issue=2015-16&num=&view=]

Resolved, on the motion of Mr Graham: That the following new paragraph be inserted after paragraph 1.24:

'Job creation in the regions remains a major challenge. The latest census figures show that in the five years between 2011 and 2016, 342,000 jobs have been created in Sydney, while outside Sydney the number of jobs has decreased by 17,000.' [FOOTNOTE: Matt Wade, 'Sydney jobs boom puts pressure on transport and house prices', *Sydney Morning Herald*, 9 November 2017, https://www.smh.com.au/business/the-economy/sydney-jobs-boom-puts-pressure-on-transport- and-house-prices-20171108-gzhitj.html; Standing Committee on State Development, NSW Legislative Council, *Discussion paper*. *Regional development and a global Sydney* (2017), p 8.]

Resolved, on the motion of Mr Graham: That the following new paragraph be inserted after paragraph 2.28:

'Albury City Council also advised that the methodology and discount rate used for the assessment of projects was unknown, making it difficult to know why projects had not been approved. Ms Jo Hewitt, Acting Economic Development Team Leader, Albury City Council, informed the committee that to understand why the project had been rejected, the council had to take the additional step of making a Government Information (Public Access) Act request.' [FOOTNOTE: Evidence, Ma Jo Hewitt, Acting Economic Development Team Leader, Albury City Council, 27 March 2018, p 27.]

Resolved, on the motion of Mr Graham: That the following committee comment and recommendations be inserted after paragraph 2.30:

'Committee comment

The committee does not accept the suggested rationale that economic projects on border towns should be subjected to a reduction in the projected benefit of such projects. It is recommended that NSW Treasury further clarify whether border towns are subjected to a reduction in the projected benefits in assessing projects. It is further recommended that such calculations should be made public after projects are refused or contracts are let for all regional areas, in order to allay community concerns.

Recommendation X

That the NSW Treasury further clarify whether border towns are subjected to a reduction in the projected benefits in assessing projects.

Recommendation X

That the NSW Treasury make such calculations public after projects are refused or contracts are let for all regional areas in order to allay community concerns.'

Resolved, on the motion of Mr Green: That the following new paragraph and committee comment be inserted after 2.100:

'Mr Steve Orr, Executive Director, Regional Coordination, Regional NSW, Department of Premier and Cabinet informed of the department's Regional Leadership Executives who are tasked with 'providing a whole of Government approach to issues confronting regional communities' across nine regions. This includes 'connections with local government, generally through Local Government Joint Organisations, to provide local government perspectives on regional issues and to enable connection with local government activities'.

The Department of Premier and Cabinet advised that as of May 2018, 11 joint organisations of councils have formally commenced with the department represented on these organisations as a non-voting Board member. It is anticipated that this departmental representation will 'further strengthen the connection between state and local government'.

Mr Steve Orr, Executive Director, Regional Coordination, Regional NSW, Department of Premier and Cabinet also advised of the new larger, single regional team 'DPC Regional' within the department, which combines the former Regional Coordination Branch and the Office of Regional Development. The new team, to formally commence on 1 July 2018 'will be in a stronger position to respond to issues, allocate resource to priority areas and work with local councils' [FOOTNOTE: Correspondence from Mr Steve Orr, Executive Director, Regional Coordination, Regional NSW, Department of Premier and Cabinet to committee, 4 June 2018.]

Resolved, on the motion of Mr Graham: That the following new paragraphs be inserted after 2.104:

When questioned about the appropriateness of the discount rate when assessing projects in regional areas, Mr Stewart Webster, Acting Director, Regional Policy and Analytics, Regional NSW Group, Department of Premier and Cabinet noted the use of the discount rate was not appropriate as it can reduce the effect of long term benefits.' [FOONOTE: Evidence, Mr Stewart Webster, Acting Director, Regional Policy and Analytics, Regional NSW Group, Department of Premier and Cabinet, 27 March 2018, p 46.]

Mr Luke Aitken, Senior Manager Policy, NSW Business Chamber also supported the view that the current discount rate undervalues the economic benefit of projects.' [FOOTNOTE: Evidence, Mr Luke Aitken, Senior Manager, Policy, NSW Business Chamber, 27 March 2018, p

Resolved, on the motion of Mr Colless: That Recommendation 4 be amended by inserting at the end: 'taking into account the social benefits as well as economic benefits'.

Resolved, on the motion of Mr Graham: That the following new recommendation be inserted after recommendation 4:

'Recommendation X

That the NSW Government review the discount rate that applied to the Benefit Cost assessments to ensure that it is appropriate for the current low interest environment.'

Resolved on the motion of Mr Green: That the following new paragraphs be inserted after 2.131:

Inquiry participants expressed concerns about the Destination NSW funding framework, in particular the mechanisms of administering funding to regions. Ms Jennifer Bennett, Executive Officer, Central NSW Councils, told how Destination NSW funding is 'administered from Sydney', which has restricted the ability of the regions to manage their own marketing budgets: "If you look at the funding framework ... marketing funding is administered by Sydney. We stump up our marketing dollars, we give them to Sydney, and they come back at some point with some marketing program for us". [FOOTNOTE: Ms Jennifer Bennett, Executive Officer, Central NSW Councils, 27 March 2018, pp 21 and 23].

Another concern held by inquiry participants, as noted in the discussion paper, was that the substantial funding allocated towards the Destination Networks would be "absorbed in the establishment, staffing and running of Destination Networks, rather than reach the local communities they were intended to assist." [FOONOTE: Submission 28, Bland Shire Council, p 13; Submission 20, Central NSW Councils, p 7; Standing Committee on State Development, NSW Legislative Council, Discussion paper: Regional development and a global Sydney (2017), p 35].

Resolved, on the motion of Mr Green: That the following paragraph and recommendation be inserted after recommendation 5:

'Committee comment

The committee acknowledges the concerns of inquiry participants regarding the Destination NSW funding framework and the mechanisms for the allocation of funding to the regions. It is recommended that Destination NSW review the allocation of funding and funding framework for Destination Networks and the Regional Tourism Fund.

Recommendation X

That Destination NSW review the allocation of funding and funding framework for Destination Networks and the Regional Tourism Fund.'

Resolved, on the motion of Mr Graham: That the following new paragraph be inserted after paragraph 3.10:

'The most important data to be available are figures for economic growth, employment and sectoral employment that distinguish the performance of regional New South Wales. These data series should be published at a quarterly interval in order to provide regular economic feedback to New South Wales policy makers'.

Resolved, on the motion of Mr Veitch: That the following new paragraph be inserted after paragraph 3.110:

'The NSW Aboriginal Land Council advised it was crucial that in any regional economic development strategy, [local aboriginal land councils] should be seen as "key players" and that such strategies require "comprehensive and meaningful consultation with Aboriginal peoples, including with [local aboriginal land councils]." [FOOTNOTE: Correspondence from Mr Stephen Hynd, Executive Director, Business Improvement, NSW Aboriginal Land Council, to committee, 20 April 2018]

Resolved, on the motion of Mr Veitch: That the following new recommendation be inserted after paragraph 3.128:

'Recommendation X

That the NSW Government, when developing regional economic strategies for Aboriginal communities, include genuine consultation and involvement of local Aboriginal communities.'

Resolved, on the motion of Mr Colless: That the following new paragraphs be inserted after 4.18:

'Central West and Orana

As noted in the discussion paper, the Central West and Orana sit at the heart of New South Wales and encompass a region that primarily lies west of the Great Dividing Range. Major towns include Bathurst, Orange, Dubbo, Lithgow, Mudgee, Cowra, Parkes and Forbes.

A key logistical project currently under way that has the capacity to facilitate a stronger and smoother supply chain for the Central West is the Inland Rail Link from Melbourne to Brisbane. The Inland Rail Line is funded by the Australian Government with construction already underway.

According to Engineers Australia, the Inland Rail Line will provide opportunities for New South Wales to move goods into the new Western Sydney Airport, offering regional exporters access to varied overseas markets.' [FOOTNOTE: Standing Committee on State Development, NSW Legislative Council, Discussion paper. Regional development and a global Sydney (2017), pp 70 and 73; Submission 25, Engineers Australia, p 3.]

Resolved, on the motion of Mr Green: That the following new paragraph be inserted after paragraph 4.18:

Newell Highway

As outlined in the discussion paper, the Newell Highway while recognised as the "economic backbone of regional New South Wales" has been plagued by blockages, particularly those caused by periodic flooding events. Inquiry participants told of the significant impacts that flooding events of 2017 have had on the region, particularly for freight, tourism and local businesses.' [FOOTNOTE: Standing Committee on State Development, NSW Legislative Council, Discussion paper. Regional development and a global Sydney (2017),p 72; Transport for NSW, Newell Highway Corridor Strategy, http://www.transport.nsw.gov.au/projects/current-projects/newell-highwaycorridor-strategy]

Resolved, on the motion of Mr Colless: That recommendation 12 be amended by inserting 'and Blayney to Demondrille railway line' before 'including seeking funding through the National Rail Program'.

Resolved on the motion of Mr Green: That the following paragraph be inserted after recommendation 12:

'Committee comment

The committee acknowledges the significant impact flooding can have on the Newell Highway corridor, including impeding freight and tourism to the towns and regions along the corridor and the flow on effect this has for local businesses. The committee notes that the NSW Government has commenced upgrade projects on the Newell Highway corridor to improve flood immunity to address the issue.'

Resolved, on the motion of Mr Graham: That the following new recommendation be inserted after paragraph 4.97:

'Recommendation X

That the NSW Government immediately engage in a high level strategic dialogue with all three levels of government and NBN Co. to establish a working group to discuss the NBN rollout. This would focus on the strategic priorities for the New South Wales rollout, the speed of the rollout, and explore the practicalities of a national broadband network service guarantee.'

Resolved, on the motion of Mr Veitch: That:

- a) The draft report as amended be the report of the committee and that the committee present the report to the House;
- b) The transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry be tabled in the House with the report;
- c) Upon tabling, all unpublished attachments to submissions be kept confidential by the committee;
- d) Upon tabling, all unpublished transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry, be published by the committee, except for those documents kept confidential by resolution of the committee;
- e) The committee secretariat correct any typographical, grammatical and formatting errors prior to tabling;
- f) The committee secretariat be authorised to update any committee comments where necessary to reflect changes to recommendations or new recommendations resolved by the committee;
- g) Dissenting statements be provided to the secretariat within 24 hours after receipt of the draft minutes of the meeting;
- h) That the report be tabled on 7 June 2018.
- i) That the Chair consult with the committee for a suitable date to hold a press conference.

4. Inquiry into the defence industry in NSW

4.1 Correspondence

The committee noted the following items of correspondence:

Received:

- 5 April 2018 Email from Mr Gregor Ferguson, Innovation Sub Committee, Sydney Aerospace and Defence Interest Group to committee, providing written responses to discussion points from the inquiry into the Defence industry roundtable hearing
- 7 May 2018 Email from Mr Bob Hawes, Chief Executive Officer, Hunter Business Chamber to committee, providing additional information to the committee about Hunter Defence
- 15 May 2018 Email from Ms Angela Petty, Communications and Coordination Officer, Centre for Defence Industry Capability, Department of Industry, Innovation and Science to secretariat, advising that the responses to answers to questions on notice are with the office of the Minister for Defence Industry for approval
- 16 May 2018 Email from Commodore Peter Scott, Director, Defence NSW, NSW Department of Industry to secretariat, providing additional information on the Defence Industry Advisory Group
- 25 May 2018 Email from Mr Bob Hawes, Chief Executive Officer, Hunter Business Chamber to committee, requesting that information provided on 7 May 2018 remain confidential.

Sent:

- 9 May 2018 Email from secretariat to Commodore Peter Scott, Director, Defence NSW, NSW Department of Industry, seeking further information about Defence Industry Advisory Group
- 10 May 2018 Email from secretariat to Professor Iver Cairns, Professor in Space Physics, University of Sydney, Director, SpaceNET and Director of the ARC Training Centre for CubeSats, Unmanned Aerial Vehicles and Their Applications, regarding the expected return of

- answers to questions on notice for the inquiry into the defence industry in New South Wales roundtable (the QONs have not been received with the due date being 3 May 2018)
- 23 May 2018 Email from secretariat to Professor Iver Cairns, Professor in Space Physics, University of Sydney, Director, SpaceNET and Director of the ARC Training Centre for CubeSats, Unmanned Aerial Vehicles and Their Applications, regarding the expected return of answers to questions on notice for the inquiry into the defence industry in New South Wales roundtable (the QONs have not been received with the due date being 3 May 2018).

Resolved, on the motion of Mr Graham: That the committee authorise the publication of correspondence from:

- Mr Gregor Ferguson, Innovation Sub Committee, Sydney Aerospace and Defence Interest Group, providing written responses to discussion points from the inquiry into the Defence industry roundtable hearing, received on 5 April 2018
- Commodore Peter Scott, Director, Defence NSW, NSW Department of Industry to secretariat, providing additional information on the Defence Industry Advisory Group, received on 16 May 2018.

Resolved, on the motion of Mr Veitch: That the committee keep correspondence from Mr Bob Hawes, Chief Executive Officer, Hunter Business Chamber, dated 7 May 2018, confidential as per request of the author as it contains sensitive information.

4.2 Answers to question on notice

The committee noted that the following answers to questions on notice were published by the committee clerk under the authorisation of the resolution appointing the committee:

- Professor Andrew Dempster, received 18 April 2018
- Commodore Peter Scott, Department of Industry NSW, received 12 April 2018
- Mr Laurie Koster, Global Defence Solutions, received 2 May 2018
- Hunter Business Chamber, received 7 May 2018
- Centre for Defence Industry Capability, received on 23 May 2018
- Professor Iver Cairns, received 25 May 2018.

Submissions to the discussion paper – Defence industry in New South Wales

The committee noted that the following submission to the discussion paper was published by the committee clerk under the authorisation of an earlier resolution: submission no. 35a.

Consideration of chair's draft report entitled 'Defence industry in New South Wales' The Chair submitted his draft report entitled Defence industry in New South Wales, which, having been previously circulated, was taken as being read.

Resolved, on the motion of Mr Graham: That the following new committee comment and recommendation be inserted after paragraph 2.21:

'Committee comment

The timelines associated with defence procurement mean that bipartisan support is required in order to engage with the decision makers in Defence.

The committee is of the view that this requires a point of engagement for Defence NSW to the Parliament of New South Wales which allows a bipartisan, long term, informed discussion

across the Parliament with the goal of supporting New South Wales to engage strategically with the Federal defence procurement machinery.

The Parliamentary Friends of Defence has a role here, although such engagement could be better supported by the creation of a Joint Committee on Defence and Space Industries to be established by the Parliament of New South Wales. Such a committee would be established upon bipartisan lines and would be briefed by Defence NSW on a regular basis. It is recommended that the Parliament of New South Wales support the establishment of a Joint Committee on Defence and Space Industries in New South Wales.

Recommendation X

That the Parliament of New South Wales support the establishment of a Joint Committee on Defence and Space Industries in New South Wales.'

Resolved, on the motion of Mr Green: That the following new paragraph and recommendation be inserted after paragraph 2.37:

'The committee recommends that the NSW Government, having provided time for its newly established Defence and defence industry support structures to mature, publically commit to reconsidering the benefits of establishing a defence ministerial advisory committee'.

Recommendation X

That the NSW Government, having provided time for its newly established support structures to mature, publically commit to reconsidering the benefits of establishing a defence ministerial advisory committee.'

Resolved on the motion of Mr Green: That paragraph 2.38 be omitted as follows: 'However, the committee is mindful that the recently established structures to support Defence and the defence industry in New South Wales are in their infancy and should be provided with time to embed and develop. On balance, the committee therefore finds that in the short term, more value may be achieved by increasing the functionality of Defence NSW and existing engagement structures'.

Resolved, on the motion of Mr Green: That the following new paragraphs be inserted after paragraph 3.76:

'Access to effective telecommunication networks

A number of inquiry participants reflected on the importance of governments in providing the necessary enabling infrastructure to support and grow local business. Access to the National Broadband Network (NBN) was identified as one such critical enabler.

The committee heard repeated references that failure to connect to the NBN was frustrating business. For example, speaking to the committee on its site visit to Williamtown, Mr Ryan Stephenson, Managing Director of Bohemia Interactive Solutions, identified potential constraints placed on business growth opportunity as a result of limited access to the NBN. [FOOTNOTE: Standing Committee on State Development, NSW Legislative Council, *Discussion Paper: Defence Industry in NSW* (2017), p 48]

The issue of access to telecommunication networks has relevance to all regional business and was discussed by numerous participants of the Standing Committee on State Development's inquiry into the Regional development and a global Sydney, which was conducted concurrently to the inquiry into the Defence industry in New South Wales.

The committee's report into Regional development and a global Sydney, dated June 2018, recommended that the NSW Government immediately engage in a high level strategic dialogue

with all three levels of government and NBN Co. to establish a working group to discuss the NBN rollout. This would focus on the strategic priorities for the New South Wales rollout, the speed of the rollout, and explore the practicalities of a national broadband service guarantee. [FOOTNOTE: Standing Committee on State Development, NSW Legislative Council, *Discussion paper: Regional Development and a global Sydney*, (2018), p 89]'

Resolved, on the motion of Mr Green: That the following new paragraph be inserted after Recommendation 6:

'The committee acknowledges the importance to local and regional defence business of having access to reliable, sustainable and affordable telecommunication networks such as the National Broadband Network. The committee therefore reiterates its recommendation outlined within its June 2018 report into Regional development and a global Sydney which urges the NSW Government to immediately engage in a high level strategic dialogue with all three levels of government and NBN Co. to establish a working group to discuss the NBN rollout. This would focus on the strategic priorities for the New South Wales rollout, the speed of the rollout, and explore the practicalities of a national broadband network service guarantee.'

Resolved, on the motion of Mr Graham: That the following new paragraph and recommendation be inserted after Recommendation 10:

'The committee notes the strength of the New South Wales research capacity in both defence and space technologies. The committee therefore recommends that the NSW Government examine the possibility of increased resourcing for the Defence Innovation Network.'

Recommendation X

That the NSW Government examine the possibility of increased resourcing for the Defence Innovation Network.'

Resolved, on the motion of Mr Graham: That the following new paragraphs be inserted after paragraph 3.167:

The committee also heard that there was particular opportunity arising from certain parts of the space industry, notably the nano and micro satellite sector. Professor Iver Cairns, University of Sydney, reflected on the predicted economic benefits arising from the growth of the CubeSat market and is potential applications and explained that growth rates were estimated to be 25 per cent or more:

The prediction is that the number of CubeSats will increase by at least a factor of four over the next five years. The associated economic benefits would be in the billions of dollars. The growth rate is not "just" 10 per cent per year but 25 per cent or more. This is expected to increase faster than that simply because we are starting to get even more economies of scale as smaller companies, such as two in South Australia—Fleet Space Technologies and Myriota—are talking about building constellations with hundreds of satellites. Google and others are talking about the same sorts of numbers. They are going into the communications field as in the Internet of Space and the Internet of Things, plus Earth observations, positioning navigation and timing things. We are talking about real commercial applications. [FOOTNOTE: Evidence, Professor Iver Cairns, Professor in Space Physics, University of Sydney, Director, SpaceNET and Director of the ARC Training Centre for CubeSats, Unmanned Aerial Vehicles and Their Applications, 4 April 2018, p 32] '

Resolved, on the motion of Mr Graham: That paragraph 3.172 be amended by omitting 'strong advocacy' and inserting instead 'advocacy'.

Resolved, on the motion of Mr Graham: That Recommendation 11 be amended by omitting 'strong advocacy' and inserting instead 'advocacy'.

Resolved, on the motion of Mr Graham: That the following new paragraph and recommendation be inserted after Recommendation 11:

'It is New South Wales based space researchers that are leading the new Space 2.0 agenda, focused on nano and micro satellites. The committee received evidence that this part of the industry is growing at 25 per cent a year, well above the growth of 10 per cent a year across the rest of the space sector.

New South Wales is already the leading space research jurisdiction in Australia. In order to strengthen this position, the committee therefore recommends that the NSW Government:

- add space to the list of priorities in high-tech manufacturing alongside Defence
- seek an urgent report from the incoming NSW Chief Scientist and Engineer as to opportunities for New South Wales to join the national space effort.'

Recommendation X

That the NSW Government:

- add space to the list of priorities in high-tech manufacturing alongside Defence
- seek an urgent formal report from the incoming Chief Scientist and Engineer as to the opportunities for New South Wales to join the national space effort.'

Resolved, on the motion of Mr Colless: That:

- a) The draft report as amended be the report of the committee and that the committee present the report to the House;
- b) The transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry be tabled in the House with the report;
- c) Upon tabling, all unpublished attachments to submissions be kept confidential by the committee;
- d) Upon tabling, all unpublished transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, and correspondence relating to the inquiry, be published by the committee, except for those documents kept confidential by resolution of the committee;
- e) The committee secretariat correct any typographical, grammatical and formatting errors prior to tabling;
- f) The committee secretariat be authorised to update any committee comments where necessary to reflect changes to recommendations or new recommendations resolved by the committee;
- g) Dissenting statements be provided to the secretariat within 24 hours after receipt of the draft minutes of the meeting;
- h) That the report be tabled on 7 June 2018
- That the Chair consult with the committee for a suitable date to hold a press conference.

5. Adjournment

The committee adjourned at 11.01 am until Friday 1 June 2018, at 12.15pm, Macquarie Room, Parliament House (Provisions of the Forestry Legislation Amendment Bill 2018 public hearing).

Alex Stedman

Committee Clerk

IFGISI	ATIVE	COUNCIL.	