



**A Submission to the NSW Legislative Council
Standing Committee on State Development**

by Regional Development Australia - Illawarra

Defence Industry in NSW

June 2017

Executive Summary

The Illawarra region is located in close proximity to key defence operations, as well as half way between Sydney and Canberra. This proximity is a key strategic competitive advantage, especially if East Coast Defence growth occurs in the long term.

The Illawarra is well positioned as a capable and smart region to support the NSW Government's strategy to increase Defence investment in NSW and grow our market share of Defence spending. The Illawarra Defence Industry Ecosystem is strong and highly developed skills are extant in the region.

Defence specialty steel production has been a rich part of the tapestry of our heritage and the innovation and skills base to support the steel industry is highly developed. BlueScope's Port Kembla steelworks is the largest steel production facility in Australia. The NSW Government procurement reforms for steel supply could be adopted by the Federal Government, which would ensure the maximising of Australian Steel in the growing Defence industry.

A small maritime Defence presence in the Illawarra would have a tremendous positive impact on the Illawarra's economy. The University of Wollongong is a powerhouse of innovation and home to the Defence Materials Technology Centre. Leveraging the innovation capability of the region, at a grass roots industry level as well as working with the University of Wollongong, provides an opportunity to both secure and grow Defence innovation and the Illawarra's regional economic potential.

This submission outlines four recommendations, including:

- Strategies to maximize the use of Australian Steel in Defence procurement
- Leveraging the capability and Illawarra regional competitiveness for Defence opportunities
- Strengthening linkages to smart and capable regions, such as the Illawarra
- Ways to secure and grow Defence innovation and regional economic potential.

Introduction - Illawarra Region

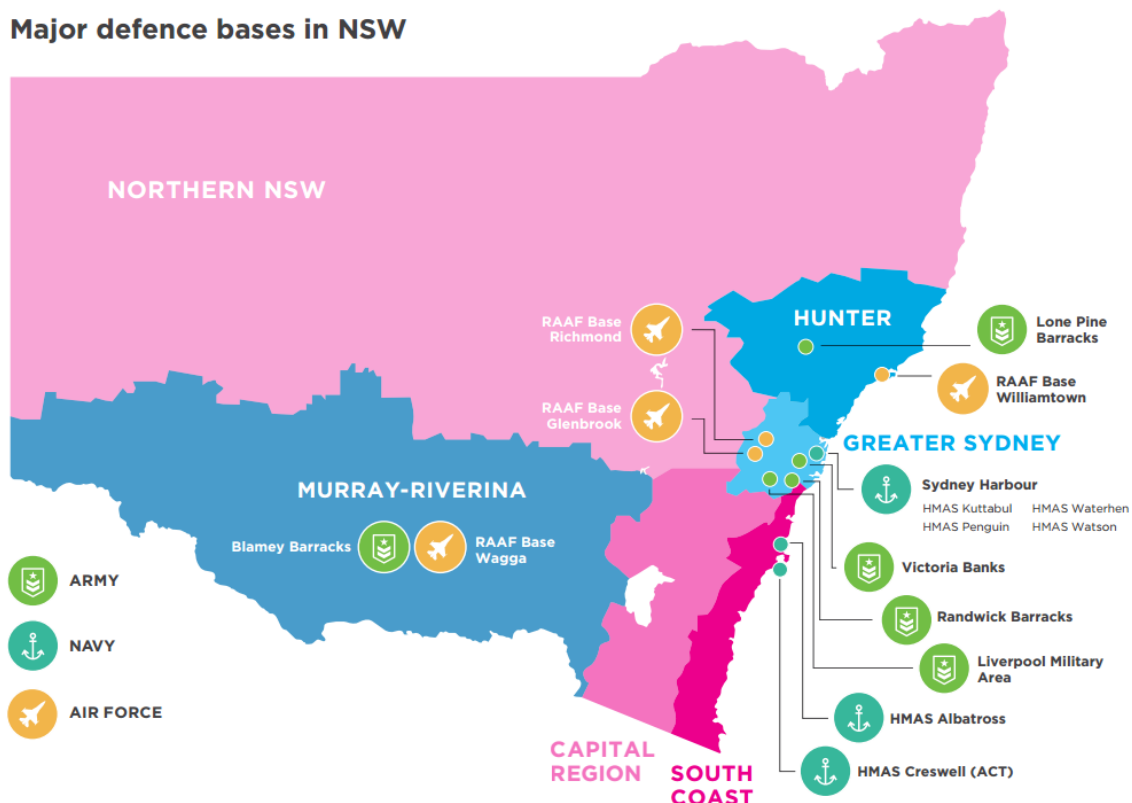
The Illawarra region is contiguous with Sydney's south and south-west. Its regional capital Wollongong is NSW's third largest city. The Illawarra region includes the Local Government Areas (LGAs) of Wollongong, Shellharbour and Kiama and is home to around 300,000 people. It shares a northern border with Sydney and southern border with the Shoalhaven.

As the third largest economy in NSW, the Illawarra contributes significantly to the State's production output (\$16.5 billion in 2012-2013) and is experiencing its own residential growth across the West Dapto Urban Release Area, the largest urban release area in NSW after Sydney Northwest and Southwest growth areas. Once complete, the release area will include 19,000 lots and house around 50,000 residents over the next 30-40 years.

The Illawarra has a skilled workforce, particularly in steel and heavy industry and presents an excellent lifestyle opportunity for Defence personnel with close proximity to Sydney, Canberra, Kingsford Smith airport, HMAS Albatross and HMAS Creswell. Traffic is less congested, housing more affordable and staff training and research provided through TAFE and the University of Wollongong.

See figure below of major defence bases in NSW, with the Illawarra located on the East Coast, one hour north of HMAS Albatross and one hour south of Sydney Harbour.

Major defence bases in NSW



1. Maximising the use of Australian Steel in Defence industry

Manufacturing of steel has been a core part of the Illawarra industry for decades. Many specialty steels for Defence have been developed in Port Kembla, including bullet proof plate, aircraft steel, and in the 1940s around 45,000 Owen sub-machine guns were produced in Port Kembla.

Defence specialty steel production has been a rich part of the tapestry of our heritage and the innovation and skills base to support the steel industry is highly developed. BlueScope's Port Kembla steelworks is the largest steel production facility in Australia. With an annual production capacity of 2.6 million tonnes of crude steel it manufactures slab, hot rolled coil and plate products.

In April 2017, the NSW Government announced steel procurement reforms to ensure that NSW Government infrastructure tenders after 1 October 2017 comply with the new Australian Steel Standard (AS/NZS 5131). The Illawarra region welcomed the procurement changes, and Mark Vassella, BlueScope's Australian and New Zealand chief executive said:

"Given BlueScope supports over 19,000 direct, indirect and induced jobs in NSW, this is welcome news for creating a level playing field. We urge the NSW government to ensure the economic benefit test, via a weighting or credit to local suppliers in recognition of our contribution to the NSW economy, comes into effect at the same time."

In May 2017, it was announced that BlueScope steel will be exported to Spain to build one of Australia's new naval ships. Navantia will procure 4,500 tonnes of raw steel for this ship building project.

Local company Bisalloy highlighted their role in the manufacture of steel plate as vital to Defence for armour protection such as the quenched and tempered steel plate Bisalloy makes. A profile of Bisalloy Steel and their specialty steel production is provided below:

Bisalloy Steel

Based in Wollongong, and working in close collaboration with local steel manufacturer BlueScope and the Defence Science and Technology Group, Bisalloy's range of defence and ballistic grades of steel are specifically designed for use in military applications where light-weight, maximum protection and superior ballistic performance is required. Steel grades manufactured by Bisalloy such as Ultra High Toughness Armour and Ultra High Hardness Armour exceed US military standards.

Bisalloy's distinguished accomplishments include providing all of the armour and high-performance plate for the Collins-class submarines, Adelaide-class frigates and Australian Army Bushmasters vehicles. Bisalloy have also proudly supplied their Australian made material to militaries and civilian customers through North America, Asia, the Middle East and Europe. Several foreign governments in these regions have qualified Bisalloy's armour plate for use by their militaries.

Recommendation 1:

The NSW Government recommend the Federal Government adopt the NSW procurement reforms for steel supply and Defence procurement, effective 1 October 2017.

2. Capability: Skills and Industry Capacity

The [Illawarra Shoalhaven Regional Plan](#) identifies aviation, defence and advanced manufacturing as one of several regional priority growth sectors. Further, the Investor Prospectus '[Wollongong – a city transformed](#)', Advantage Wollongong lists Defence, as a key growth sector:

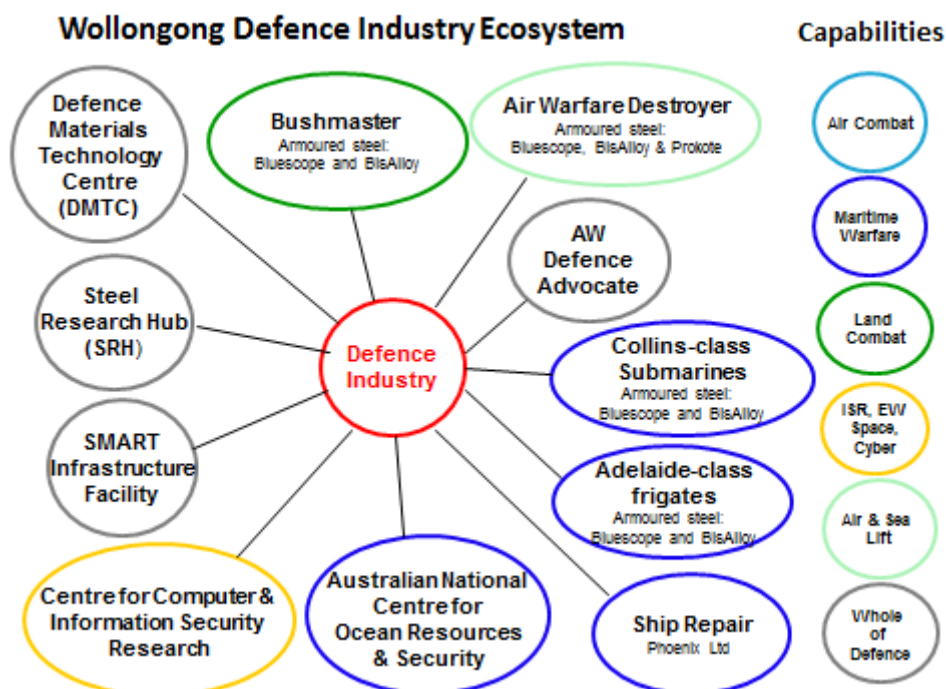
"The region has a strong record of providing innovative defence technology and services to the Australian and global defence industries. The region has a unique range of capabilities in design, engineering and manufacturing that are applicable across joint land, sea and air domains. Many Wollongong companies supply specialised services and products to defence primes and contractors, with several world class research institutes at the University of Wollongong further enhancing the region's defence credentials."

Parliamentary Secretary for the Illawarra and Kiama MP Gareth Ward said in his 22 February 2017 media release:

"Wollongong is at the cutting edge of applied research and industry collaboration, and has a track record in converting technical know-how into defence capability. We have leading defence research and development organisations in Wollongong including the maritime arm of the Defence Materials Technology Centre (DMTC), the SMART Infrastructure Facility, the Steel Research Hub and Centre for Computer and Information Security Research."

The Illawarra Innovative Industry Network (i3net) is a powerful network of industry based companies working from the Illawarra. i3net has a depth of capability and skills which position it well for defence opportunities. i3net actively seeks out new market opportunities; including defence, not only for individual members but also for members to combine their resources. *From bolts to blast furnaces, from 3D printing to submarines, i3net can deliver.*

The Wollongong Defence industry ecosystem is both broad and deep. See below a diagram of the Wollongong Defence ecosystem and capabilities it can support in Defence.



The NSW Department of Industry works with companies on developing their quad charts for Defence and has identified [34 companies as defence suppliers](#) within the Shoalhaven, Illawarra and South East. The NSW Department of Industry provides businesses with grass roots assistance to grow their confidence, communicate effectively and be in the best position to procure work from Defence, and this support should continue to be resourced. We believe that this resource should be continued as it enables businesses to enhance their competitiveness for Defence industry opportunities.

Recommendation 2:

The NSW Government continues to resource support to regional businesses to enhance their competitiveness for Defence industry opportunities.

3. Potential for regional economic impact

A small maritime Defence presence in the Illawarra would have a tremendous positive impact on the Illawarra's economy. The University of Wollongong undertook a study tour to San Diego in April 2016 to learn about the social and academic impacts of San Diego Naval Base from a regional development and education perspective.

San Diego is a harbor city that thrives from a significant military presence. There is a strong culture of entrepreneurship and research, which combine to foster innovation and growth. San Diego's military and defence complex is a critical economic driver in the region. The University of Wollongong concluded that the city of Wollongong has the potential to become a microcosm of the San Diego success story.

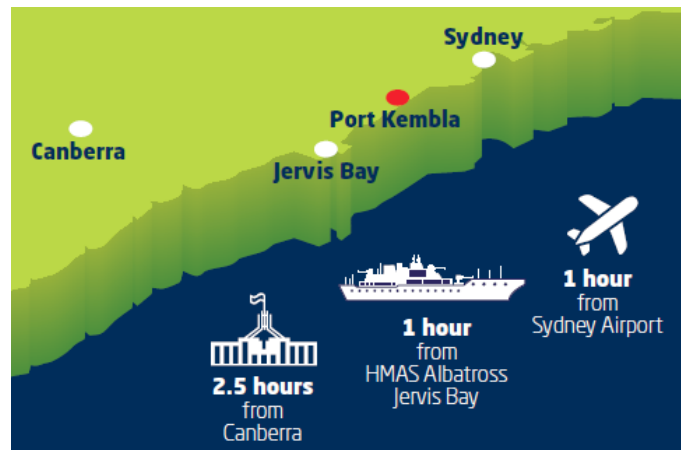
The ['NSW Defence Strategy, NSW Strong, Smart and Connected', February 2017](#), has a planned initiative, 4A, to 'Explore opportunities to help reduce congestion in Fleet Base East' as well as to support the growth of the Defence industry in the Illawarra region.

Defence has made significant commitments to Garden Island over the next decade, including upgrading wharves through the Integrated Investment Program. There is also pressure on Sydney Harbour from growth of the cruise ship industry. Port Kembla is a potential option to support Garden Island/Navy East Coast operations for future long term strategic consideration by Defence.

In June 2015, RDA Illawarra and a regional consortium developed a report [The Jewel of the East Coast: The Case for Relocation of Royal Australian Navy Fleet Base East to the Port of Port Kembla](#). This submission by Illawarra regional stakeholders was supplementary to the submission by Senator The Hon Concetta Fierravanti-Wells (October 2014) to the Defence White Paper.

The Illawarra region and the Port of Port 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. See below figure showing proximity of Port Kembla to key locations.



The Port of Port Kembla is an economic asset of national significance, critical to the future economic growth and development of the Illawarra and NSW. 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.

The [‘NSW Defence Strategy, NSW Strong, Smart and Connected’, February 2017](#), recognises the importance of Defence to the NSW economy. NSW is home to over 80 Defence bases and facilities, more than any other state, and Defence invests \$5.5 billion annually in its operational expenditure. Defence and the industry that supports it currently directly employ over 26,500 people in NSW.

The intention of the NSW Defence Strategy is to ‘work closely with defence industry to attract an increased proportion of Defence investment in the state and help small and medium businesses to gain better access to local and global supply chain opportunities’. RDA Illawarra supports this strategy and believes that the Illawarra region can provide vital capability and industry support to this strategic direction.

The NSW Defence Strategy aim of retaining and enhancing NSW market share of Defence spending can be best served by strengthening linkages to smart and capable regions such as the Illawarra.

Recommendation 3:

The NSW Government recognise that their strategy to increase Defence investment and grow market share of Defence spending will be best served by strengthening linkages to smart regions such as the Illawarra.

4. Innovation

Aviation, defence and advanced manufacturing is a key industry growth sector in the Illawarra region and innovation in this cluster is often led by the University of Wollongong in collaboration with industry partners.

The University of Wollongong (UOW) is a key source of strength for the Illawarra economy. As the Illawarra's economy transitions, the University's role is to continue to develop the skilled human capital of the region. Furthermore, UOW provides economic leadership to enable the region to reach its full potential and be a globally competitive region. UOW creates knowledge and innovation that supports the wider economic growth and development of our community.

UOW is home to the Defence Materials Technology Centre (DMTC), a multi-partner collaborative research centre providing materials and manufacturing solutions, instrumental in fostering 'Defence-ready' companies benchmarked internationally that together build industrial capacity in Australia's regions.

Innovation in the Defence industry will be further enhanced in the future through adoption of lessons learned from visiting San Diego, a city in which a military presence has created growth and innovation and embraced Blue Technology. The parallels with Wollongong are clear as Vice-Chancellor Paul Wellings observed:

'The city of Wollongong has the potential to become a microcosm of the San Diego success story. It is a harbour city with a strong capacity for military activity, both in infrastructure and employment. It has a successful University with capacity and expertise for defence related activities, including research and training. It has a population ready to embrace new opportunities in the wake of shifting traditional industries in the area.'

The Australian National Centre for Oceans Resources and Security (ANCORS) is also based at UOW. ANCORS is Australia's only multidisciplinary university-based centre dedicated to research, education and training on ocean law, maritime security and natural marine resource management. ANCORS also provides authoritative policy development advice and other support services to government agencies in Australia and the wider Indo-Pacific regions, as well as to regional and international organisations and ocean-related industry.

As part of a region founded on manufacturing now facing transformation, the University of Wollongong has established the Southern Manufacturing Innovation Group (SMIG) to develop networks through collaboration with industry.

Officially launched in May 2015, SMIG meets regularly to discuss different themes such as sustainability. The aim of this group is to create a three-way exchange of ideas and specific collaborative opportunities, engaging UOW researchers across multiple disciplines, the Innovation and Commercial Research Division and local industry.

'UOW has a long history of industry engagement. We are part of a region that was founded on manufacturing and is now facing transformation. UOW is deeply committed to the future and vitality of this sector. Establishing a forum for collaboration is just one way we aim to support ongoing development,' said Leader, Manufacturing Innovation at Global Challenges, Prof Geoffrey Spinks.

UOW not only collaborates with industry for innovation, but has also broadened its strategic focus to other regions to target smarter solutions for NSW. A new alliance (NUW) between the Universities of NSW, Wollongong and Newcastle will expand NSW innovation network to foster new ideas and create new businesses.

The NUW collaborative approach will explore, develop and deliver benefits that are greater than the sum of their individual parts. The three universities netted a combined research income of more than half a billion dollars in 2015. The NUW alliance is exploring opportunities to:

- Develop skills in critically important new sectors such as cyber security
- Apply 'Smart Cities' technologies to improve connectivity, productivity and liveability of our regional cities, and
- Create greater access to higher education for students in regions.

Recommendation 4:

The innovation capability of the Illawarra region and the University of Wollongong is acknowledged by the NSW Government as a way to secure and grow Defence innovation and regional economic potential.

5. Consultation

In its April 2017 submission to the Senate Inquiry into the impact of Defence training activities and facilities on rural and regional communities, the Regional Australia Institute's recommended the need for closer engagement:

"Engage more with state and territory governments to: (i) identify rural and regional communities with a high Defence presence and establish a priority list of communities in need of greater state-based support mechanisms; (ii) establish targets for local business Defence contracts within these regions; and (iii) develop local businesses to become 'Defence ready'."

RDA Illawarra endorses this recommendation and notes that much has already been done to foster 'Defence-readiness' among regional businesses with Defence capabilities in the Illawarra.

The federal government has introduced City Deals as a collaborative framework that goes across all levels of government to drive a long term strategic agenda with agreed commitments based on economic outcomes. The MOU signed between the NSW and Australian Governments outlines principles for a collaboration plan consistent with the approach to regional engagement proposed in the Defence Industry Strategy. The City Deals methodology could support solid economic outcomes for the Illawarra.

RDA Illawarra invites the Standing Committee to visit Wollongong for consultation with stakeholders.

Recommendations

In this submission, RDA Illawarra has addressed the Standing Committee's Terms of Reference, particularly:

- 1(a) maximize opportunities for NSW-based companies from Defence's growing exports and investment in defence capability – in both acquisition and sustainment;*
- 1(b) encourage defence industry innovation, research and education including developing the future workforce;*
- 1(d) maximize the economic benefits of locating defence force bases and defence industry in the regions*
- 1(f) further enhance collaboration between the NSW Government and Commonwealth agencies.*

The following RDA Illawarra recommendations are put to the Defence Industry in NSW Inquiry, 1-4 below.

Recommendation 1:

The NSW Government recommend the Federal Government adopt the NSW procurement reforms for steel supply and Defence procurement projects, effective 1 October 2017.

Recommendation 2:

The NSW Government continues to resource support to regional businesses to enhance their competitiveness for Defence industry opportunities.

Recommendation 3:

The NSW Government recognise that their strategy to increase Defence investment and grow market share of Defence spending will be best served by strengthening linkages to smart regions such as the Illawarra.

Recommendation 4:

The innovation capability of the Illawarra region and the University of Wollongong is acknowledged by the NSW Government as a way to secure and grow Defence innovation and regional economic potential.