



## **CPA Australia Defence Industry Conference**

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### **SPEECH NOTES FOR CHAIRMAN VICE ADMIRAL CHRIS RITCHIE AO RANR**

**7 December 2010**

Thank you for extending me the opportunity to share my thoughts on the current state of play of defence and defence industry in Australia.

Defence is an industry very close to my heart, having spent 40 years, the majority of my career, serving in the Royal Australian Navy.

I consider myself privileged to be able to couple a military perspective with a relatively newly-formed defence industry perspective, since joining the Board of ASC in 2007 following a time as Chair of the Air Warfare Destroyer Alliance Principals Council.

I was also a part of the Proust review of Defence management in 2007, which afforded me an opportunity to see defence as a business through a different lens to that which I had used while in uniform.

Throughout this talk I will refer to ASC to illustrate my points which I hope will give a local, South Australian flavour to what I say given that we are headquartered here in Adelaide.

#### **Defence: a world wide perspective**

Defence in Australia is a big business. 90,000 employees, a budget of nearly \$26 billion, \$15.4 billion of which is spent on equipment, maintenance, supplies and services. Perhaps because of this defence is a business which has, and will continue to be, subject to intense scrutiny. But these figures are but the tip of an iceberg for the global player.

Let me give you an idea of the size of the global industry that you might seek to access.

According to 2009 figures released this year global annual military expenditure stands at a little over \$1.5 trillion and continues to rise. This represents a six percent increase since 2008 and a 49 percent increase since 2000.

This \$1.5 trillion figure corresponds to 2.7 percent of world gross domestic product (GDP), or approximately 225 dollars for each person in the world.

The United States with its massive spending budget is the primary determinant of the current world trend, and its military expenditure now accounts for just under half of the world at 46.5 percent of the world total.

Distantly following the United States is China with 6.6 percent of the world share, France with 4.2 percent, the United Kingdom with 3.8 percent and Russia with 3.5 percent.

Interestingly, the 15 countries with the highest defence spending account for over 82 percent of world GDP.

Australia sneaks into the top 15 list of countries at number 14, just ahead of Spain, with 2009 defence expenditure of \$19 billion.

However, when you consider the proportion of national GDP spent on defence, a very different picture is painted.

The United States, China, France, the United Kingdom, Russia and indeed Australia, do not feature high on this list at all. In fact, top billing goes to North Korea which spends, experts believe, around 22.9 percent of its national GDP on defence. Followed by Oman with a defence spend of 11.4 percent, and Qatar and Saudi Arabia each with a defence spend of 10 percent of their national GDPs.

The United States, with an annual spend of 4.1 percent of its GDP, is ranked 26<sup>th</sup> in the world, while Australia, with a 2009 military spend of three percent of our GDP, is 44<sup>th</sup> on the list.

In order to develop these figures, The World Factbook compares like with like and, in this instance, we should assume that Australia's annual veterans affairs cost of around \$12 billion is included in this percentage.

In fact, Minister for Defence Stephen Smith announced only a fortnight ago that Australia's defence budget is 1.9 percent of the country's GDP.

But more about Australia's defence spending later.

The global financial crisis has resulted in many nations cutting back on all sorts of public spending and yet military spending continues to increase.

The *Stockholm International Peace Research Institute Yearbook 2010* categorically attributes this to a combination of factors, including:

- Foreign policy objectives;
- Real or perceived threats;
- Armed conflict and policies to contribute to multilateral peacekeeping operations; and
- Availability of economic resources.

The last point refers to rapidly developing nations like China and India that have seen their economies boom in recent years. In addition, rising world market prices for minerals and fossil fuels have also enabled some nations to spend more on their militaries.

The United States has unquestionably been the most formidable military power in recent years. Its spending levels, as I mentioned earlier, is the primary determinant of world military spending.

Generally, US military spending has been on the rise. Recent increases are attributed to the so-called War on Terror, and the Afghanistan and Iraq invasions, but it had also been rising before that.

To put US military spending into perspective: it is seven times more than China's, 13 times more than Russia's and 73 times more than Iran's. Plus, US military spending is some 44 times the spending of the so-called six 'rogue' states, namely Cuba, Iran, Libya, North Korea, Sudan and Syria, whose combined spending amount to around \$16 billion.

The United States and its strongest allies – the NATO countries, including Japan, South Korea and Australia – spend something in the region of \$1.1 trillion on their militaries combined, representing 72 percent of the world's total.

While, the six potential so-called 'enemies', plus Russia and China together, account for about \$169 billion, or 24 percent of the United States' military budget.

While some argue that high US military spending allows other nations to spend less, the *BBC* recently noted that poverty fuels violence and defence spending has a tendency to rise during times of economic hardship.

And, the global financial crisis is potentially ushering in enormous economic hardship around the world.

The *BBC* claims that “at a time when a deep economic recession is causing much turbulence in the civilian world, defence giants such as Boeing, EADS and Northrop Grumman, are enjoying a reliance revenue stream from countries eager to increase their military might”.

*BBC* goes on to claim that “shareholders and employees in the aerospace and defence industry are clearly the ones who benefit most from growing defence spending”.

Defence companies, whose main task is to aid governments' efforts in national defence, routinely highlight their capacity to contribute to economic growth and to provide employment.

The global defence industry is big business and offers a lot of opportunity. This trend is reflected in Australia as well.

### **Defence: an Australian perspective**



Australia will spend a record \$27 billion on defence this year, including more than \$1 billion for operations in Afghanistan.

In relative terms, Australia's defence expenditure as a proportion of GDP at around 3 percent, including veterans' affairs expenditure, is greater than that of most developed Western nations, but is a figure long regarded as about the norm for a developed country.

Indeed, a succession of defence chiefs and pundits over the last thirty years has striven mightily to reach this figure. The near future might well see them trying to defend it!

Of note, in our Asia Pacific region, military expenditure increased by 8.9 percent in real terms in 2009 (to \$276 billion).

Australia's defence spending is calculated and based on the Australian Government's defence priorities.

In May 2009, the Australian Government released its *Defending Australia in the Asia Pacific Century: Force 2030* white paper, developed to guide all aspects of its defence policy.

The white paper sets out and explains the ADF's priorities, of which there are four.

The first of these priorities is to maintain the capability to defend Australian territory from any credible attack without relying on help from the combat forces of other countries.

The second priority is to contribute to stability and security of Australia's immediate neighbourhood in the South Pacific and East Timor. This involves conducting military operations, protecting our nationals, providing disaster relief and humanitarian assistance, and stabilisation interventions if required.

The next important strategic priority is to contribute to coalitions of forces in the Asia-Pacific region, including assisting our Southeast Asian partners to meet external challenges, as well as meeting our alliance obligations to the United States.

Finally, the fourth priority is to contribute to international coalitions of forces outside Australia's immediate neighbourhood in support of efforts by the international community to uphold global security and a rules-based international order.

Overwhelmingly, the white paper endorses that Australia's defence policy should continue to be founded on the principle of self-reliance in the direct defence of Australia and in relation to our unique strategic interests.

However, the paper also reinforces that Australia should maintain a capacity to do more when required; consistent with those strategic interests that Australia might share with others, and within the limits of our resources.

Some of the headline acquisitions tasked in the white paper include: 12 future submarines, three air warfare destroyers, eight large frigates to replace the ANZACs,



twenty offshore combatant vessels, 24 new combat helicopters, six new heavy landing craft and 1,100 new combatant vehicles.

Against the backdrop of the 2009 white paper, Prime Minister Kevin Rudd gave an address about what the white paper means for the country. During this important speech, he talked about the links between the strategic needs of the white paper, the equipment demands of the white paper and also the financial backdrop against which Defence finds itself.

The Prime Minister said: “we will be devoting approximately \$30 billion to fixing the existing force. This includes approximately \$6 billion for more than 50 new projects to fill the crucial gaps that have been left in equipment and protection... approximately \$18 billion to top-up existing projects that have been under funded in the past and approximately \$6 billion to fix systems and infrastructure that support our women and men in uniform”.

Following the 2010 Federal election, the Government has advised Defence that it remains committed to implementing the white paper, which includes a new funding model that will provide Defence with three percent real growth to 2017/18, and 2.2 percent real growth from 2018/19 to 2029/30.

However, the Government forewarned at the launch of the white paper that, in order to fund this real growth, the Government would seek \$20 billion over 10 years in cost reductions.

These cost reductions are being sought as part of a strategic reform program, but I will speak more about this later.

### **Defence: a customer’s perspective**

Before I talk about how your organisations can benefit from Australia’s defence programs, it’s pertinent to provide you with some context about the industry itself that should be kept in mind when dealing with Defence as a customer.

The structure of Defence is not well understood by many who seek to do business with it or indeed many who comment in the media and elsewhere on its performance and efficiency.

Traditionally it has been thought of in terms of the three services: Navy, Army and Air Force. Most of the headlines are built in that way... Navy sex scandal, Army boots no good, Air Force fighter costs escalate, you know the sort of thing to which I refer...

But twenty years of constant change driven by the need to curtail rapidly escalating costs in defence have produced what we might call supporting organisations with great control over the majority of the defence dollar, and increasing independence in the manner in which they provide support to the uniformed services.

Change began in the mid ‘70s with the Tange review which saw the creation of a single Department of Defence containing the services and the civilian arm.



Services which had existed as total entities in their own right with separate ministers and conducting and supporting their operations independently began down the path of what is today called jointery.

By the early '90s, force development and operations were the first obvious signs of a joint approach. Commercial support as an alternative to doing everything in house kicked in at this time and was conducted as a joint endeavour on selected areas of support.

A central organisation for major capital equipment, today known as Defence Materiel Organisation, or DMO, came next, to be enhanced over time to also encompass minor capital and through life support of equipment.

Today, DMO is responsible for \$11.5 billion of the Defence budget; nearly half the total.

The original Commercial Support Program initiatives also continued to grow and, today, what we know as the Defence Support Group, or DSG, manages all base support and maintenance to the tune of some \$3.9 billion dollars annually, another 15 percent or so of the total.

So today when most suppliers deal with Defence they are dealing with either the DMO or the DSG, not with the services. Defence suppliers may come across people in uniform but these people are generally on secondment to those two organisations.

The main impact of all this change has been twofold:

Firstly, and as intended, duplication or indeed triplication in the provision of all these services has been avoided and hopefully costs reduced and efficiency increased. Effectiveness might be debated by some.

Secondly, and not intended or envisaged, accountability has been diffused and this is a common thread in criticism of Defence over the last ten years or so. Why? In my view, largely because control of the money shifted from the user to the provider.

Demand was not always constrained by fiscal reality. On the other side of the coin, the providers became bureaucracies in their own right not always concerned with the most effective outcomes - a strange business arrangement.

When I was Chief of Navy, I used to say it was like going to shop in a place where the shopkeeper had both the goods I wanted and the money to buy them. All I had were poorly formed expectations.

Driven by the need to recoup \$20 billion in ten years to help fund the 2009 *Defence Capability Plan*, defence has embarked on a significant strategic reform program which identifies this issue as a major concern.

The Strategic Reform Program has three key elements: improved accountability, improved Defence planning and enhanced productivity.



Nominal control of the dollar for through life support has been returned to the service chiefs. But I should emphasise that major capability acquisition remains in joint hands.

The Capability Development Group, or CDG, a joint uniformed organisation, develops the requirements for new capability, while the DMO runs all aspects of the acquisition from strategy to project management.

Because it is by far the bigger of the two, DMO receives all the publicity and hence is often mistakenly seen to be the originator of the requirement.

The relevant service chief sponsors the project and takes responsibility for management of the capability when it comes into service.

To expand on this, delivering defence capability follows a three-stage flow of responsibility within Defence.

First is the strategic policy and posture – an assessment of the environmental and potential threats with the subsequent development of a strategy and policy to guide the Australian Defence Force's structure and capability framework.

Australia's defence strategy and policy, of course, comes from the Defence white paper, which I talked about earlier. You could say that this part of the process represents the 'why'.

The next stage of the capability cycle resides with service chiefs, who identify individual service and joint capability needs, and the Capability Development Group, which develops the specifications to meet the service capability requirements. Let's call these parts of the process the 'what' and the 'when'.

Finally, DMO is charged with either building or acquiring, and maintaining capability to deliver the service requirement on time. DMO's job is about the 'how'.

Of course there is an extensive committee process to validate and prioritise requirements and solutions, and a two pass approval process to obtain Government approval. Ultimately, Cabinet's National Security Committee has the final say.

It is through the DMO that industry is engaged.

It's worth noting that DMO has two primary goals in its dealings with industry: one is effectiveness and the other is efficiency.

Through implementation of the Strategic Reform Program, DMO will seek to transfer 10 percent of its sustainment budget to deliver 30 percent to acquisition activities.

This objective is underpinned by DMO's ongoing commitment to seek effectiveness and efficiency from industry.

## **Defence Industry Policy Statement**



In support of DMO's objective, in June this year, the then Minister for Defence Materiel and Science, the Hon. Greg Combet, released a new defence policy statement entitled *Building Defence Capability – a Policy for a Smarter and More Agile Defence Industry Base*.

This policy is congruent with the Government's Defence white paper and Strategic Reform Program, and outlines over \$445 million of Government programs that industry can access to improve their competitiveness, their capacity for innovation, their ability to enter export markets (largely through global supply chains), their opportunity to win work locally and the skills of their workforce.

I understand that this policy is a culmination of two and a half years of engagement with, and analysis of, the defence industry. And, it is a policy that, as Chairman of ASC, I fully support.

While the policy introduces four key elements to guide defence industry, namely: setting clear investment priorities; establishing a strong Defence-industry relationship; seeking opportunities for growth; and building skills, innovation and productivity, it is the detail within these priorities that I believe represent the key elements that primes and SMEs alike should be concerned with.

The Government's policy is well presented and clear in its intent. Therefore, I will not reiterate it. What I would like to do however, is provide a view on how to make it work for the Commonwealth, how industry can play its part and some examples from within ASC of how we are helping to fulfil the ambitions of the policy.

First of all, there is a clear need for competitiveness, innovation and productivity.

While some could argue that Government policy should support indigenous programs at all costs for the benefit of sustaining in-country jobs, capability and industry, this is not necessarily going to be the case.

The statement makes it quite clear that the government will not use offsets or local content quotas to protect Australian defence industry from overseas competition. I strongly support the Government's need for competitiveness, where it is sensible to do so, as well as the Government's need for improved productivity.

The Commonwealth Procurement Guidelines establish value for money as the core principle underpinning all Australian Government procurement. Value for money assessments considers other factors in addition to cost, including fitness for purpose, performance history, relative risk, flexibility, etc.

A good case in point here is Australia's place in the future of submarine design and build. Should we assume that entitlement will be the basis for a decision?

If this were the case, the arguments in favour of awarding the SEA 1000 Future Submarine project to ASC are compelling – ASC has already built a successful fleet of submarines and the company has already established a burgeoning defence industry base around this.



However, Australia's defence industry must break the mind set that ASC has a God given right to be awarded this program; there is no entitlement and ASC has no such right unless it is earned fair and square. This is a key point made in the Defence Industry Policy Statement. Australia's defence industry must be competitive on an international playing field.

Off its own back, ASC has set upon a path to drive workplace productivity and efficiency, and invest in the development of Future Submarine solutions.

If ASC wins a share of the SEA 1000 program, it will not be because the company is Australian-owned, or because it is head-quartered in Adelaide or because ASC already has the workforce and the tools. It will be because the company has competed and been proven worthy on an international playing field.

A large part of winning on that playing field will come from a strong relationship between Defence and industry. The ability to compete will rely on clear communication and innovation in both requirements and offers. Mutual trust, proven competence and good relationships based on these factors are the keys to success.

### **Working together: defence primes and SMEs**

Let me now turn to the whole industry and, in particular, consider the part played by SMEs.

On the major acquisition side, Defence is generally dealing with players of overseas parentage, like BAE Systems, Thales Australia, Boeing Australia, Lockheed Martin, SAAB Systems, Raytheon Australia and Australian Aerospace.

ASC is considered the only Australian-owned defence prime although Austal, which has a wider customer base, may be a contender. Thus much of the Australian owned contribution comes from local SMEs upon whom the primes must place great reliance. Asia Pacific Defence Reporter estimates there are in excess of 3,000 SMEs in the country, the majority of which are contracted to the primes.

The Government's position on innovation, efficiency and productivity extends to SMEs and their ability to compete for work in Australian defence programs.

The Government argues that the relationship between primes and SMEs is crucial. Defence needs strong relationships between these organisations to ensure that its capability needs are developed on time and on budget, with an expectation on primes to nurture and support SMEs as a vital source of innovation and niche capability in the local defence marketplace.

I strongly support this statement and commend the Government for its recognition of this.

Wearing my ASC hat again, and in the context of submarine maintenance, the company's supply chain includes over 2,000 unique vendors.



It's worth noting that not all supply chains are the same. Some companies manufacture a constant product, while others, like Woolworths and Coles, use their supply chains to their competitive advantage.

The supply chain that supports submarine maintenance, and indeed other major defence maintenance programs, must be dynamic to sustain a constantly changing and evolving demand.

Unlike other businesses, ASC is unable to pop down to the local Bunnings store to procure materials when we run short. There are stringent controls in place to ensure all materials that are used on the submarine or AWD platform are fit for purpose.

ASC is dealing with people's lives. We can't take any short cuts because the safety of the submarine crew is absolutely paramount.

So we rely on the expertise and the high-quality production of materials sourced from our SMEs. This is highlighted by the fact that 80 percent of ASC's supply chain is represented by SME organisations.

The Collins Class Submarine Build program had a contractually-embedded Australian industry content target of 70 percent. At the conclusion of the build, ASC had procured 73.5 percent of materials from Australian suppliers.

The majority of these SMEs have gone on to thrive in Australia's defence industry. In fact, today ASC sustains a higher Australian industry content percentage in its submarine maintenance – absent of any set targets.

Independent of any Australian industry targets, these SMEs are competitive, innovative and efficient, and were able to demonstrate value for money to pave the way for their involvement in submarine maintenance.

The Government has mandated that, like primes, SMEs must provide value for money in order to be considered for Australian defence projects.

And as I mentioned earlier, a value for money assessment considers factors like: fitness for purpose of the good or service offered, supplier performance history, relative risk, flexibility of the good or service, financial considerations, etc.

In our experience, ASC has found that there are many advantages that SMEs can provide over large organisations. SMEs are more entrepreneurial. They are more willing to be innovators and are less likely to be burdened by established hierarchies.

Being small businesses though, SMEs do need help. And it is incumbent on large supply chain organisations, like ASC, to provide guidance and support.

We aid our SMEs by undertaking collaborative reviews with suppliers that may be deficient in some areas, and work with them to develop plans to address issues.

Similarly, a unique aspect of defence procurement is that quite often a significant amount of objective quality evidence must be provided by suppliers with each acquisition.



This level of detail can be quite new to small businesses and, given this, defence primes should take it upon themselves to work with and educate relevant suppliers on any specific requirements. Quite often this could involve teaching SMEs the composition of evidence needed and visiting their premises to assist in the smooth delivery of the end product.

### **Earned Value Management**

As a quick aside to this point, I would like to draw your attention to an Earned Value Management, or EVM, master class that is being offered during this congress.

EVM is mandated in DMO policy and is a project control process based on a structured approach to planning, cost collection and performance measurement. It facilitates the integration of project scope, time and cost objectives for performance measurement and management.

The key function of EVM is to establish objective measures of the actual work achieved compared to the plan for that work. From this, cost and schedule variances can be determined which give trend and early warning information that can be used to forecast project performance.

I briefly raise this point because, depending on the criticality of the defence procurement, the duration of the contract and the risk profile for the project, DMO requires EVM to be applied.

ASC's Daniel McLoughlin and Rick Girardi are hosting this master class. ASC was the first company in Australia to gain Earned Value Management System validation from the Department of Defence and, given that this is a CPA congress, it would be remiss of me not to point out the importance of understanding EVM.

### **Economics of Defence: a military perspective**

I understand Dr Hugh White will talk about the pressures on Defence budgets in his address tomorrow and I am sure Steve Wearn, DMO's Chief Financial Officer, will provide you with a DMO perspective.

I would therefore only like to make some very general points on the economic aspects of Defence.

I mentioned earlier the three percent of GDP has, for some time, been seen as a benchmark to be realised.

This benchmark has been reached and, since 2001/02, Defence has been well funded, particularly in achieving the capabilities set out by Government.

Today, this funding is under increasing public scrutiny as large and expensive projects are compared with increasing pressures on a Commonwealth budget attempting to defy the rest of the world and drag itself back into surplus.



Indeed, the \$20 billion in savings demanded by the Government from the Defence portfolio as a contribution to the Force 2030 outlined in the white paper, was the first sign that the good times were ending.

Despite some scepticism internally and externally, Defence is committed, through its Strategic Reform Program, to these savings. And, as demanded by the reform program, industry must play its part in order to deliver the future force as envisaged.

### **Defence: a South Australian perspective**

So what does the defence industry mean to South Australia?

From small beginnings, South Australia has focussed on growing its defence presence in recent years, and is intent on building and maintaining a sustainable defence industry.

There are five jewels in South Australia's crown:

- The \$8 billion Air Warfare Destroyer build contract and AWD Systems Centre;
- The \$1 billion Orion aircraft maintenance and upgrade contract;
- The multi-billion 25-year through life support contract for the Collins Class submarines;
- The \$1 billion Customs Project Sentinel contract, which is the world's largest fixed wing civil maritime surveillance program; and
- The 1,200 personnel mechanised battalion that is being relocated to Edinburgh in 2011.

South Australia is the high-technology centre for Australia's defence industry, with more than \$10 billion in contracts; more than any other state.

The maritime and electronics sectors represent South Australia's core strengths, and accounts for about 60 percent of DMO's total in-country spend – some \$5.6 billion this financial year alone.

In South Australia, both of these sectors have a healthy and stable base of sustainment activities and will experience a rapid uptake of acquisition activities over the next few years, mainly due to the construction of the air warfare destroyers.

It has been estimated that major defence and specialist industry-related activities contribute around \$1.21 billion to the State's economy and this figure is rising.

Not to mention some 23,000 South Australians are either directly or indirectly employed by the defence sector, with direct specialist industry employment projected to increase by around 4.8 percent per year.



So where can you find this work and what are South Australia's primary breadwinners?

The State's top four major defence and security projects are the AWD program, Collins Class submarine through life support, AP-3C aircraft maintenance and upgrades, and the Project Sentinel civil maritime surveillance program.

These projects account for about 40 percent of the total defence and industry contribution to the State's economy, and about 35 percent of total defence industry employment.

Specifically, ASC's Collins Class submarine through life support contract is estimated to directly and indirectly contribute an average \$149.6 million and 1,400 jobs to the State's economy per year.

While, over peak years including 2009/10 to 2012/13, the AWD project will make an average annual contribution of some \$292 million and 1,800 jobs to South Australia's economy.

Against the backdrop of a downturn in the State's automotive and wine industries, defence is an industry sector which continues to grow in leaps and bounds, and provide numerous opportunities for established primes, suppliers, SMEs and individuals.

### **Vision: the potential impact of the SEA 1000 Future Submarine project**

Without a doubt, South Australia's defence future is well and truly assured by the Federal Government's promise to construct the next generation fleet of submarines in Adelaide.

While the economic effect of this program can be difficult to quantify at this early stage, we can use the Collins Class submarine build program as a guide to better understand the potential effect SEA 1000 Future Submarine will have in South Australia and across the country.

To give you an idea of the sheer complexity of building a submarine, each Collins boat contains around 500,000 parts. In comparison, a car has 17,000 parts and a Boeing 777 has around 100,000 parts.

Each Collins Class submarine also has 75km of cable and 24km of pipe.

It required 2,500,000 personnel hours to build each submarine, while in comparison only 36 hours are required to build a car and 50,000 hours to build a Boeing 777.

Therefore, each Collins Class submarine took around 60 months of elapsed time to construct.

To support ASC's submarine construction program, the company relied on an extensive local, national and international supply chain that included 1,600 vendors, 150 subcontractors and four major labour pool providers.



Constructing six Collins Class submarines was no small feat. The project, awarded in 1987 and worth \$5 billion at the time, is considered the most complex in Australian defence history.

Throughout the 16-year build program, ASC managed over 2,000 individual contractors, 1,250 of which were Australian companies.

As I mentioned earlier, under the Submarine Build Contract, ASC was required to support a minimum 70 percent of Australian industry content for the platform, which was a very challenging objective at the time.

Furthermore, in 1987 there were only 35 Australian companies with ISO 9000 quality accreditation.

Largely on the back of the Collins Submarine and ANZAC Frigate projects, that number grew to over 1,500 by the year 2000; truly nation building!

As a result of investment in Australian industry, ASC surpassed the 70 percent contracted requirement and achieved 73.5 percent Australian industry involvement during the construction of the submarine fleet.

Many of the Australian companies that helped achieve this impressive Australian industry involvement statistic not only survived the end of the build phase, but have gone on to thrive.

ASC ramped up from its founding five employees in 1985 to 1,200 employees during the construction of the submarines. And, for every ASC employee, it was estimated that there was a multiplier effect of two to three within local industry.

Therefore, the Collins Class Submarine Build program didn't just deliver a project, it lay the foundations for an industry; a high-end skills industry that put an international spotlight on Adelaide as a premier defence hub.

SEA 1000 will not only serve to maintain South Australia's existing defence industry, but heighten it.

Some 70 percent of ASC's supply chain spend during the Collins build was for prime item equipment, like periscopes, sonar, diesel engines, etc. from original equipment manufacturers.

On a state-by-state basis, South Australia was the big winner with over \$200 million spent on procurement in this State alone. This represented about 54 percent of the total procurement spend across the program.

This trend of favouring the home state of the prime contractor has also been noted in other major defence projects, such as the ANZAC Frigate and, more recently, the Air Warfare Destroyer project where the program is headquartered in Adelaide.

So, as you can expect, the SEA 1000 Future Submarine project will not only sustain an already thriving defence industry in this State, but will also serve to significantly enhance it.



## **Working in defence: implications for industry**

What are the benefits of working in Australia's defence industry?

There are, of course, some obvious answers: long term projects, skills can be developed and enhanced, and Defence is a good customer which pays its bills on time and carries no debt risks.

But, it's the not so obvious reasons that become the most attractive: export potential, opportunities to work on challenging projects never before undertaken in the country, and the increased prestige to a company's reputation as a result of association with defence programs.

However, with the benefits come incredible responsibility and companies wanting to break into Australia's defence industry must be both respectful and mindful of the inherent obligations that go hand-in-hand with defence.

For new businesses to be successful in winning and growing into defence work, they need to understand how defence operates, remain committed, and offer innovative solutions and value for money.

And, above all else, understand the fundamental importance of getting a product or service delivered on time, on cost and doing the job that was asked for, in a business that is critical to national security and the safety and wellbeing of service men and women in the Australian Defence Force.

Defence offers very little margin for error and defence industry is always exposed to this reality.

### **Conclusion**

In closing I reiterate the activity in defence industry in Australia.

DMO is currently managing over 210 approved major projects and over 100 sustainment fleets.

At present, there are approximately 29,000 personnel employed within Australia's defence industry base, and this is expected to grow to 33,000 over the next few years.

Defence is a burgeoning and courageous industry; I highly recommend being a part of it.

Thank you.