



WHY WE NEED A MORE FOCUSED DEFENCE INDUSTRY POLICY

Submission by the Australian Industry Group Defence Council to the 2013 Defence White Paper process

Introduction

The Australian Industry Group Defence Council (referred to hereon as the Defence Council) welcomes the opportunity to contribute to the 2013 Defence White Paper process.

This submission makes a number of positive recommendations to improve the delivery of Defence capability with a stronger Australian defence industry resulting from the new Defence White Paper.

Australia's defence industry is the fourth arm of the nation's defence effort. The Australian Defence Force (ADF) would have been unable to operate effectively in war zones, such as Afghanistan and Iraq, without the weapons and support provided by defence industry.

The 2009 Defence White Paper offered an ambitious program of new equipment to be acquired for the ADF, estimated to cost more than \$100 billion over the following decade. It foreshadowed 3 per cent growth in Defence expenditure over the same period. Defence industry favourably embraced this program through investment in innovation, infrastructure and skilling.

By 2012, Defence spending had reduced to its lowest level since 1938 (1.6 per cent of GDP) and the planned equipment acquisition program has been scuttled. A number of defence industry companies have closed and more than 5,000 people have lost their jobs. Confidence has collapsed and uncertainty prevails throughout defence industry. This has a direct effect on national security.

The Defence Council believes that the following themes should drive development of the 2013 Defence White Paper:

1. Creating a more focussed approach to defence industry policy.
2. Linking Australia's strategic circumstances and planned government and industry investment in capabilities for the ADF.

3. Focus on a realistic, affordable plan for acquiring new equipment for the ADF.
4. Encourage investment by defence industry in equipping and sustaining the ADF.
5. Focus on recruitment and support of a skilled workforce.
6. Renewed investment in R&D, allowing the ADF to maintain a technological capability edge critical for the nation's long-term survival.
7. Actively encourage and support dynamic and healthy SMEs.
8. Support defence industry to promote closer positive engagement in the Asian region, as a key plank of the recently released *Asia Century White Paper*.

The 2013 Defence White Paper should provide the framework for development of a new **Defence Capability Plan** and **Defence Industry Policy**. The Defence Council looks forward to assisting Defence in the preparation of both documents.

Greater certainty helps provide security not only for all Australians, but also for the critical capabilities represented in defence companies, large and small. This should be a fundamental tenet of the 2013 Defence White Paper.

EXECUTIVE SUMMARY

Key Policy Points:

The Defence Council believes that now is the time for a more focussed approach to defence industry policy in Australia. There are several reasons for this:

- The central issue is how to connect the new strategic guidance, which gives priority to our own region, to defence industry policy at a time of sustained fiscal constraint.
- Industry must be able to deliver innovation that gives us a regional operational edge, whilst also delivering capability to the ADF in a more cost-effective way over the full life cycle of acquisition and through life-support.
- Defence industry and the ADF should not be seen as separate entities. There is now a deeply integrated relationship between them, given the contracting out that has occurred in almost all aspects of the provision of military equipment and sustainment to industry over the last 20 years. Defence industry is now critical to the support of the ADF, including in military operations.

- The outlook for sustained fiscal constraint means that all aspects of achieving defence capability and sustainment should be open to challenge and innovation, both within industry and Defence itself. In these difficult economic times, it is appropriate to examine ways in which industry can be involved with Defence to bring about more efficient and predictable ways of doing business.

The Defence Council's Approach to this Submission:

- This submission has reviewed the defence industry policies in every Defence White Paper over the last 25 years. It has also analysed the four major reports on defence industry by Governments: the 1992 Parliamentary Secretary for Defence Roger Price's report on *Defence Policy and Industry* ; the 1998 Minister for Defence Industry, Science and Personnel Bronwyn Bishop's *Defence and Industry Strategic Policy Statement* ; the 2007 *Defence and Industry Policy Statement* by the Minister for Defence Brendan Nelson ; and the 2010 report *Building Defence Capability: A Policy for a Smarter and More Agile Defence Industry Base* by the Minister for Defence Materiel and Science Greg Combet.
- They are all remarkably similar in identifying the same problems such as the need for clear investment priorities, reprogramming defence acquisitions to mitigate the impacts associated with large expenditure peaks and troughs, and identifying and sustaining strategically important priority areas for industry. But implementation has been patchy and often not sustained.
- We have come to the conclusion, therefore, that there is no purpose in recommending yet another basic review of defence industry policy. Neither do we see a need for radical new concepts or new assistance programs. What we do need now are key policy recommendations that reflect current strategic and financial realities in a more focused way.
- We have identified nine specific areas of defence industry policy where we think a more focussed approach will deliver more effective outcomes for the Government and the Defence Organisation, and more predictability for defence industry.

Recommendations:

1. Align Defence Industry Policy with Strategic Guidance: In the post Afghanistan era, the 2013 Defence White Paper needs to deliver tighter alignment between strategic policy and those defence industry priorities that will guide defence procurement. This means concentrating on capabilities that will be

most in demand in Australia's unique regional operating environment. In our view, this will require comprehensive review of the previous Priority Industry Capabilities (PICs) such as sonar, infrared, radar detection, electronic warfare, signal processing, as well as intelligence, surveillance and sensor equipment. There are also generic industrial capabilities required for sustainment of the PICs. They include design and development; system of systems integration; test and evaluation; modelling and simulation; qualification and certification; and manufacturing technologies (including specialist treatments and processes, precision measurement, nondestructive inspection, assembly and test). We recommend that the review of PICs be done in close consultation with industry, so that there is a practical understanding of gaps and deficiencies where capabilities have been rundown in recent years. We also recommend that the DMO be required to develop a structured roadmap for the implementation of the PICs, so that we have evidence-based milestones against which industry and DMO can be measured.

2. Ensuring the Capability Edge and the Role of Innovation: Given the more rapid acquisition of advanced military capabilities in our region of primary strategic concern, maintaining the capability edge for the ADF is going to become more and more demanding. In addition, the scale of advanced technological expertise required to implement the Government's capability priorities is unprecedented in Australia's history. Therefore, driving innovation in defence industry technology must assume a higher priority. The Defence Council strongly supports the view that there must be a closer working relationship between the DSTO and industry if technological innovation is to be driven faster. The concept of innovation precincts for industry announced in the Government's "Industry and Innovation Statement – a Plan for Australian Jobs" on 18 February 2013 needs to be further examined to determine how it relates to existing clusters of defence industry expertise and how the new precincts will improve connections between business and the research sector. We also recommend that it would be timely to undertake a detailed survey of defence-related R&D and determine how closely it accords with guidance on Defence priority needs of industry and the critical role of innovation. The Defence Council recognises that extending the service life of ADF equipment will place new demands on innovation and sustainment.

3. Implications of the Highly Integrated Relationship between Industry and Defence: Over the last 25 years, industry and Defence have become much more closely integrated. The ADF cannot now operate without industry in such areas as sustainment, garrison support and training, as well as support of military operations. The Defence Council recommends there should be greater use of an industry-Defence secondment program with the aim of building mutual

understanding and expertise further on both sides. We also consider that relations between Defence and industry are still hampered by unnecessary bureaucracy and overly detailed oversight, for example by the Systems Project Offices (SPOs). This needs re-examination. In these tough economic times, the Defence Council recommends that the remaining areas of Defence be opened up to further competitive outsourcing, including the DMO.

4. Managing Defence Demand and Industry Investment: All previous defence industry policy statements have identified the need to grow local industry at an achievable rate and to manage Defence demand, so that it encourages industry investment. But successive Governments have struggled to meet their ambitions in this regard. Ironing out the peaks and troughs of defence procurements has proved difficult in practice. The fact remains that if investment in defence companies is to be encouraged the Government must set clear priorities and stick to them as closely as possible – otherwise, there will be the inevitable disinvestment and loss of jobs. We recommend that Government recommit itself to defence demand management and the associated implementation of new defence projects.

5. The Future of Naval Shipbuilding: The Government has nominated naval shipbuilding as a strategic industry capability. The Defence Council believes that it will also be critical to national security. Australia is in the process of embarking upon its largest ever naval shipbuilding program, which – if properly managed – will be sufficient to sustain a robust naval shipbuilding industry well into the 2050s, and possibly beyond. It is crucial there is not a so-called valley-of-death between the completion of the current AWDs and the commencement of the next major naval shipbuilding program, otherwise key workforce skills will be dissipated. Present planning will not sustain our shipyards through the period until the next major planned naval shipbuilding work starts. Skills and expertise built-up in the last few years will again dissipate. The Defence Council is strongly of the view that urgent direct intervention is necessary to provide short-term naval shipbuilding work over and above the longer term demand management recommended in this submission. The Defence Council recommends that the Government publicise the potential economic impact of the approximately \$120 billion of expenditure on naval shipbuilding and sustainment in future decades as having the potential of being the largest nation-building project since the Snowy Mountains Scheme. The Defence Council also suggests there should be an independent analysis of the impact on Australia's economy, its skills and employment base, and the multiplier effects in regional Australia of our future naval shipbuilding plans.

6. Improving the Defence Skills Base: Industry requires early guidance on Defence's long-term plans for capability development to determine whether to invest in appropriate skills. This has been made quite difficult by projections that, following the 2009 Defence White Paper, there would be a sustained increase in demand for a growing defence industry workforce. Since then, several defence prime contractors have had to reduce their workforces significantly. *The Defence Council urges a return* as soon as practicable to more predictable and sustained growth in Defence spending. In the meantime *the Defence Council strongly supports* the specific programmes that Defence has developed to overcome skills shortages and hence improve productivity. *We recommend* that programs such as Skilling Australia's Defence Industry (SADI) and Industry Skilling Program Enhancement (ISPE) continue to be supported by Government, given the continuing tight skilled labour market.

7. The Importance of SMEs: The Government states it is important to build the innovation capacity of SMEs, which have often provided innovative niche capability in support of Defence especially in the area of high technology. In turn, the SMEs need a strong relationship with the primes to capitalise on the sales of their products and so sustain further innovation. However, it has to be recognised that the SMEs are most vulnerable when challenging fiscal circumstances – such as at present – impact on the Defence Budget. Many of the industry development initiatives identified in the 2010 Combet Report are particularly targeted at the SMEs. *The Defence Council recommends* that these and other programs be sustained by Government in the current period of Defence budgetary restraint. *The Defence Council endorses* the proposition that the SMEs need special attention in these difficult economic times, as identified in the Government's recent innovation policy statement.

8. A Different Approach to Defence Exports: The Government has developed programs to assist industry to compete through the Global Supply Chain program. However, the "lucrative opportunities" that were said by the 2010 Combet Report to exist have not eventuated. *We should continue* to pursue opportunities in the global supply chain market, whilst also looking for different opportunities for defence exports. *The Defence Council recommends* exploring potential defence markets in Southeast Asia flowing from the expertise of our defence industry in adapting, repairing and maintaining defence equipment and its experience as a provider of a wide range of support services to the ADF – such as training, simulation, logistics and garrison support. Southeast Asia is a potential market of great strategic importance to Australia. Most defence forces in the region have a poor track record in maintaining and supporting military equipment. Australia's defence international engagement with Southeast Asia

can extend to defence industry cooperation, with the relationships of Australian firms in the region forming part of the broader defence relationship.

9. Implementation of our Recommendations : *The Defence Council strongly recommends* that a new approach be taken to how performance against the next White Paper policy statements on defence industry is to be measured. It would be useful if the DMO were required to implement a structured roadmap for each of our policy recommendations in this submission. In this way, evidence of success over time could be measured and corrective action taken. Progress reviews could be undertaken jointly with the DMO and industry at regular meetings of the Defence Council with the Minister for Defence.

WHY WE NEED A MORE FOCUSED DEFENCE INDUSTRY POLICY

Part 1: Previous Defence Industry Policies

The defence industry chapters in successive Defence White Papers have been disappointing. They have generally been disconnected from the strategic guidance and force structure priorities set out at the beginning of such documents. Often, the industry chapter has appeared to be included as an afterthought and, typically, it has included a long list of defence projects, together with some generalisations about competition and the limits of defence industry policy.

The 1987 Defence White Paper was the first one to talk in any detail about policies for Australian industry to support defence self-reliance and the defence of Australia. This occurred in the aftermath of the privatisation of the formerly government-owned factories and dockyards. The capacity to maintain, repair, modify and adapt defence equipment in the Australian environment, independently of overseas sources, was described as being of fundamental importance to our combat effectiveness. For the first time, there was an analysis of how industry involvement would vary at different levels of conflict. The overall emphasis, however, was on such issues as defence assistance to industry and competition using fixed-price contracts.

The 1992 Price Report on Defence Policy and Industry, by the Parliamentary Secretary to the Minister for Defence, Roger Price, stressed the importance of a long-term relationship between Defence and industry, focusing on Australia's strategic priorities. It said that future strategic assessments and force structure reviews would give more emphasis and detail on defence priorities for Australian industry capabilities.

The 1994 Defence White Paper stated that industry's contribution to our defence effort would become more important as Australia's strategic environment became more demanding. It identified the following industry capabilities as most important for Australia's defence self-reliance:

- combat systems software and support;
- data management and signal processing, including for intelligence and surveillance;
- command, control and communication systems;
- repair and maintenance of major weapons and surveillance platforms

The 1994 White Paper stated that the Defence Organisation would consider modifying the timing of its defence projects where this improved the continuity of workflow, encouraged the sustainability of high priority skills, and did not jeopardise the capability of the ADF. Where separate capital equipment projects shared similar technologies, linkages would be established to achieve economies of scale, the benefits of commonality and a more sustainable flow of work to industry.

The 2000 Defence White Paper described Australian industry as a vital component of defence capability. It said that "We must take a strategic approach to our defence industry base, and not regard its capabilities as simply a by-product of procurement decisions". Emphasis was placed on providing clear long-term directions for the development of the ADF "to provide a more predictable and sustainable basis on which industry can plan". The Government's overall objective for Australian defence industry was set out in the earlier 1998 publication entitled *Defence and Industry Strategic Policy Statement* (report by Bronwyn Bishop the Minister for Defence Industry, Science and Personnel). That report had specific objectives, which included integrating industry into capability development; enhancing industry's contribution to the nation's capability edge; and procurement reform.

However, the 2000 Defence White Paper reported a key finding of the Community Consultation Team that: "Defence industry is worried by the increasing gap between stated policy towards industry and its practice" and that "Defence industry wants predictability and direction to allow it to plan in a sustainable manner".

The 2007 Defence and Industry Policy Statement released by the Minister for Defence, Brendan Nelson, acknowledged that the 1998 Defence and Industry

Strategic Policy Statement had “lacked robust implementation”. It proposed a new partnership between Defence and industry based on:

- A strategic approach to identifying and sustaining the priority areas of local industry capability that Australia's strategic circumstances demanded. These would be set out in future Defence Capability Plans so that industry would have a clear understanding of the Government's priorities for local defence industry.¹
- The new rules, within which Defence would procure goods and services from industry, included engaging in partnerships with industry to deliver sustained productivity gains. Of particular mention was the Government's firm expectations of suppliers to utilise Australian companies, including small to medium enterprises. Maintaining a local presence and the transfer of necessary technology and intellectual property would be assessed favourably for those defence companies who invested in Australia.
- A series of initiatives were announced through which the Government would work with industry to develop and sustain capabilities, including opening up export opportunities through global supply chains, assisting local industry to grow skills, and encouraging investment in research and development of innovative technologies.

The 2009 Defence White Paper stressed the need to fundamentally change the principles and orientation of our defence industry policy. The DMO would need to become more businesslike and defence industry should become more competitive and productive. Growing the capacity and competitiveness of local defence industry would require ongoing investment in skills development, workforce growth and improved productivity. This would include building greater flexibility into Defence Capability Plan reprogramming "to mitigate the adverse capacity and capability impacts associated with large expenditure peaks and troughs". The Government was committed to ensuring that certain strategic industry capabilities remained resident in Australia.

To this end, it had decided to establish priority industry capabilities (PICs), which were defined as those industry capabilities that would confer an essential strategic capability advantage by being resident within Australia, and which, if not available, would significantly undermine defence self-reliance and ADF operational capability. The Government claimed that it was prepared to intervene in the market to ensure the PICs remained healthy and available, if necessary by demand management and long-term contracting arrangements. The White Paper

¹ In September 2001, a Cabinet Submission by Defence Minister Peter Reith had proposed "a more strategic industry policy approach, based on sustaining key industry capabilities critical to Australia's national security needs, through better demand management of its capability requirements".

directed Defence to develop strategic policy advice on the strategic basis for identifying those industry capabilities which would attract priority support as PICs. Due to their potential to become PICs, the Government also announced it would monitor a broader range of capabilities, known as Strategic Industry Capabilities (SICs). These are capabilities which provide Australia with enhanced defence self-reliance, ADF operational capability, or longer term procurement certainty. They range, for example, from composite and exotic materials, through to geospatial information systems, guided weapons, and protection of networks, computers and communications.

The 2010 Combet Report, *Building Defence Capability: a Policy for a Smarter and More Agile Defence Industry Base*, acknowledged that capacity in defence industry could not be taken for granted. It set out four key principles: setting clear investment priorities; creating a stronger Defence-industry relationship; establishing strong growth over the decade for acquisition and sustainment; and building skills, innovation and productivity in such programs as Skilling Australia's Defence Industry (SADI), the Capability and Technology Demonstrator (CTD) program, and Rapid Prototyping, Development and Evaluation (RPDE). It concluded that the Government needed a strong, successful and skilled defence industry if it was to deliver the ADF that Australia needs for the future.

However, the Combet Report was full of warnings that industry could no longer expect the Government to use offsets or local content quotas to help protect defence industry from overseas competition. Instead, the future was one of an open and competitive defence marketplace. In the Defence Council's view, the Priority Industry Capabilities (PICs) and Strategic Industry Capabilities (SICs) were a useful expansion of previous descriptions, but there has been little evidence that in practice they have helped to sustain the research, design and engineering workforces of industry in priority areas. To the contrary, we have seen the defence industry workforce in such areas as electronic warfare and sonar decline. It is disappointing that what was proclaimed as a new Defence Industry Policy Statement has failed to sustain clear investment priorities as defence budgets and forward defence planning have seriously contracted. With the uncertainties now introduced into the marketplace, capacity in defence industry cannot be taken for granted.

Part 2: What Do We Learn From All This?

The above review of the history of defence industry policy over the last 25 years shows that numerous Government reports have been dedicated to the subject, but with only modest tangible progress. Since 1987, there have been four defence

White Papers, and – most importantly – four major reports by a Minister for Defence, a Minister for Defence Materiel, a Minister for Defence Industry, Science and Personnel, and a Parliamentary Secretary for Defence amounting to over 260 printed pages. However, it must be acknowledged that defence industry policy has lacked focussed implementation.

And what is the end result of all this? The answer is that over a quarter of a century and through both Labor and Coalition Governments there has been a surprising degree of agreement about the following:

- The critical importance of defence industry to the ADF's military capability and operational effectiveness.
- The fact that capacity in defence industry cannot be taken for granted: it needs to be planned, built, managed and continually reshaped. In the final analysis, Defence's procurement program is the only concrete tool available to shape Australia's defence industrial base.
- An associated recognition of the need to mitigate the adverse capacity and capability impacts associated with large expenditure peaks and troughs.
- Given its relatively small size, defence industry needs reasonable assurance about Defence's planned acquisitions of major equipment and competitive access to long-term sustainment contracts.
- Deciding which elements of industry need to be resident locally, and which can be delivered by overseas suppliers or through stockpiling, is a strategic choice by Government. Successive Governments have committed, at least in theory, to ensuring that certain strategic industry capabilities remain resident in Australia.
- If such essential strategic capabilities were not available, their absence would significantly undermine defence self-reliance and the ADF's capabilities for independent operations. Therefore, Governments have proclaimed a readiness to intervene in the market to ensure that strategic capabilities are available.
- Successive Governments have supported an open and competitive defence marketplace, but with the use of a variety of incentives including alliance and partnering arrangements, and sole-source arrangements where deemed necessary.
- A number of programs have been developed by Governments to improve the skills availability of the Australian defence industry workforce, to encourage innovation in defence technology, and gain access to global supply chains.

- The importance of small and medium enterprises (SMEs), which are often the source of innovation that allow the ADF to maintain its capability edge, has been stressed. A competitive and sustainable SME sector is seen by Governments as an essential feature of Australia's defence industry base.
- The importance of a closer and more cooperative relationship between the Defence Materiel Organisation (DMO) and defence industry. This has been driven, in part, by a cultural shift in Defence away from owning and controlling its own resources to utilising assets owned by the private sector. In addition to traditional manufacturers, defence companies supply a vast range of services to defence – including training, simulation, test and evaluation, facilities management, base support, logistics, maintenance and repair.

Our conclusion is that, over time, several of these key policies have either been met or partly met. But in important instances the implementation of specific policies has failed to be met or has just simply languished. A specific example is where key strategic/priority capabilities have been allowed to atrophy (for example, electronic warfare).

Part of the problem is the rapid turnover of Ministers for Defence in both Labor and Coalition governments: from 1996 to 2007 there were five Defence Ministers in the Coalition Government and between 2007 and 2013 there have been three Defence Ministers in the Labor Government. Each new Minister, even within the same Government, generally wants to put his/her own imprimatur on defence policy – including defence industry policy.

This is entirely understandable, but it leads to endless delays while “new” policies are formulated and to repetition of essentially the same basic points and ideas. It also leads to a mindset in the Defence Organisation of resistance to change and that it knows best. And because Defence is a monopsonist (or sole-source buyer) this can lead to great reluctance on the part of defence companies to be critical of the situation.

Part 3: Defence Council Proposals for Change and Improvement

The Defence Council is of the view that there is no purpose in recommending a dramatic new review of defence industry policy with all the delays that would entail. Neither do we see a need for radical new concepts or new assistance programs. These have all been canvassed *ad nauseam* over the last quarter of a century. What we need now are some key policy recommendations that reflect current strategic and financial challenges and realities. We urge the Government

to consider them seriously and include them in its implementation of the 2013 Defence White Paper. They include the following specific policies for change and improvement.

1. Align Defence Industry Policy with Strategic Guidance

In the post-Afghanistan era, Australia's strategic policy will focus more on our own region of primary strategic concern, which is essentially maritime in nature. This will mark a shift away from our preoccupations over the last decade or more with essentially land-based operations in the Middle East and Central Asia. We now need a strategic approach to identifying and sustaining the priority areas of local industry capability that Australia's changing strategic circumstances demand. Industry needs new strategic guidance so that it can adapt, modify and manufacture equipment that is suited to Australia's unique operating environment. This means that the defence of Australia, and particularly its vulnerable north and north-west approaches, will require a renewed focus. It involves greater attention to providing industry support to our military bases and operations in the north of the continent. As the 2009 Defence White Paper observes, this involves focusing predominantly on forces that can exert air superiority and sea control in our approaches. The ADF's primary operational environment extends from the eastern Indian Ocean to the island states of the South Pacific and from Southeast Asia to the Southern Ocean. This is an area with unique attributes: it covers a vast expanse, with extensive areas that have limited infrastructure available to support ADF operations; it is a harsh, largely maritime and littoral environment and one that ranges from tropical to Antarctic climates. This poses substantial challenges for sonar, infrared, radar detection, electronic warfare and signal processing, as well as intelligence, surveillance and sensor equipment. In several of these capabilities our defence industrial base has been run down. A decision needs to be made now with regard to their reintroduction. Industry also needs new guidance about what is expected for land operations and the expected change in the role of the Army with the acquisition of the two large LHDs.

The 2013 Defence White Paper needs to deliver a tighter alignment between strategic policy and defence industry policy and identify the priorities that will guide defence procurement in the coming years. We do not expect a mechanistic or detailed listing, but it would be useful if the strategic industry capabilities that are deemed critical to remain resident in Australia were identified. In our view, this will require a comprehensive review of the previous Priority Industry Capabilities (PICs) and a new approach to sustaining them and to measuring success or failure in this regard. It also needs to be recognised that sustainment of complex military systems represented in the list of PICs is not simply a maintenance task but requires engineering and advanced manufacturing skills

and expertise and access to OEM intellectual property to enable rework, modification, upgrade and integration with existing platform, combat and sensor systems. This does not mean that Australian defence industry will necessarily engage in the full-scale development of indigenous systems represented in the current list of PICs. But the skills, expertise and intellectual property to do so are crucial to independent sovereign sustainment of such priority systems in service. For example, systems-of-systems integration skills are crucial for connectivity and interoperability, particularly in a network centric environment.

2. Ensuring the Capability Edge and Innovation

Successive Australian Governments for over 25 years have given priority to the ADF having a clear technological edge relative to credible contingencies in our own region. Australia's small Defence Force and relatively few numbers of combat platforms make sustaining this capability edge of the highest priority. In turn, this means working harder at innovation to deliver both a clear technological advantage and an operational edge. The fact is, however, that given the more rapid acquisition of advanced military capabilities in our region of primary strategic concern, maintaining a capability edge is going to become much more demanding. Therefore, driving innovation in defence technology must assume a higher priority. As the 2009 Defence White Paper states, the ADF will be required to operate in an environment which is increasingly challenging, as more potential adversaries will have access to a wider range of capabilities which are comparable to ours, or will be able to exploit vulnerabilities in ours.

The Defence Council strongly supports the view that Australia must have deep defence science and technology expertise in this regard. The Government is already promoting a closer working relationship between DSTO, industry and universities and the Capability Technology Demonstrator (CTD) program has improved the transfer of technology to the ADF. If there is to be an increased emphasis on the role of innovation in defence industry, then there must be closer collaboration between industry and the DSTO. In this context, we have been impressed with the drive of the new Chief Defence Scientist to have a closer working relationship with industry. This is crucial if technological innovation is to be driven faster. As more technologically advanced systems are introduced into the ADF, there will also be an increasing need for industry to develop its own technological capabilities so that it can support and maintain them. ADF capabilities must be capable of adaptation and evolution to meet changing threats. In our view, industry will also need to keep abreast of key enabling technologies (such as cyber warfare, electronic warfare and underwater systems). The Defence Council considers that it would be timely to undertake a detailed survey of defence-related R&D to establish what money is being spent on R&D, what it

is being spent on, and how closely it accords with guidance on Defence needs of industry.

As well as being about creating new opportunities, innovation is also about finding solutions to existing problems. This is where the practical expertise of industry can be brought to bear, including by improved productivity and service delivery. Innovation is a key driver of productivity: it can include implementation of better processes or organisational and managerial change, as well as the development of new technology or the adaptation of existing technologies. As the 2009 Defence White Paper observed, innovation is needed to improve the services industry delivers and the way it delivers them. This requires creative management, organisational, teamwork and entrepreneurial skills. It means improving skills and innovation creativity across industry. A number of Defence Council members, in the context of the Expert Industry Skilling Panel, have made recommendations to Defence on meeting future skilling requirements.

3. Implications of the Integrated Nature of Industry and Defence

In recent years, Defence and industry have successfully developed a closer relationship. The Defence Organisation, including the DMO, is now more approachable and open and this has led to a greater sense of trust in industry's relations with it. The fact that Defence relies so heavily on industry for the delivery of capability and sustainment, and in such areas as garrison support and simulation and training, means that this is a deeply integrated relationship. The ADF no longer has dedicated maintenance engineers or systems integrators. The fact is that the ADF cannot now operate without industry support. This is particularly the case where independent Australian military operations are required for national sovereignty reasons.

In turn, industry is crucially dependent on the sole-purchasing power of Defence. This monopsony power will always place some limits on the frank exchange of views between companies and the DMO. Nevertheless, the Defence Council considers that the CEO of the DMO, Warren King, has encouraged improved relations with defence industry and there has been considerable improvement in communications. The DMO now listens more to industry's concerns.

Even so, there is more that Defence and industry could do to work more closely together. First, there should be greater involvement with an industry-Defence secondment programme with the aim of building mutual understanding and expertise on both sides. This was foreshadowed in the *2007 Defence and Industry Policy Statement*. While there have been important senior appointments made with industry experience to the DMO and to industry at the CEO level by

former senior Defence officials, this has not occurred so much at mid-level management. Second, relations between Defence and industry are still hampered by unnecessary bureaucracy and overly detailed oversight by the DMO's Systems Project Offices (SPOs). For example, in some instances of aircraft maintenance, the SPO has as many people as those on the actual maintenance production line. We submit that this sort of oversight needs re-examination. Third, the Defence Council would like to see the remaining areas of Defence opened up to further competitive outsourcing in such areas as IT, the changing strategic alignment of the Defence estate footprint, and in the DMO itself. There is no reason why the DMO cannot make greater use of the private sector, bearing in mind the need to be scrupulous about no conflict of interest. In these constrained economic times in Defence, all options for increased efficiencies and cost reductions should be open to challenge.

4. Managing Defence Demand and Industry Investment

Successive defence industry policy statements have identified the need to grow local industry at an achievable rate and to manage defence demand so that it encourages industry investment.² For example, the *2009 Defence White Paper* stated that greater flexibility would be built into the Defence Capability Plan reprogramming "to mitigate the adverse capacity and capability impacts associated with large expenditure peaks and troughs". A decade earlier, the 1998 *Defence Industry Strategic Policy Statement* by Minister Bronwyn Bishop declared that, where it supports strategic interests "we will manage demand by varying the timing of purchases to smooth the peaks and troughs" and that, where possible, "Defence will manage its demand to take advantage of *commonality* when buying major systems and components" (emphasis in the original).

In September 2001, Defence Minister Peter Reith's Cabinet Submission, *A New Strategic Approach to Defence Industry Policy*, stated that Defence must change the way in which it manages its demand, linking individual acquisitions to the sustainability of key industry capabilities. To this end, the Cabinet Submission recommended that the Defence Capability Plan "may require some adjustments to smooth demand and aggregate like acquisitions to facilitate industry sustainability".

This was followed by the *2007 Defence Industry Policy Statement*, which declared that for priority local industry capabilities – if routine demand proved inadequate to sustain a particular industry capability – "Defence might

² "Peaking in defence orders on Australian industry has occurred before and creates problems for management and workforce. It creates pressures for orders out of phase with priority requirements, or in excess of them". *Australian Defence* (1976 Defence White Paper), page 51.

reschedule demand, bundle projects, or use restricted or sole-source tendering". To avoid building costly overcapacity, Defence would only take these sorts of actions to the extent necessary to sustain the baseline level of priority industry capability required strategically.

In fact, successive Governments have struggled to meet their ambitions in this regard. Ironing out the peaks and troughs of defence procurements has proved difficult in practice, given the perturbations in annual defence budgets and the lack of a clear threat. But the fact remains that if investment in defence companies is to be encouraged the Government must set clear priorities and stick to them as closely as possible – otherwise, there will be the inevitable disinvestment and then Government will have to pay the costs of ramping it up again. This has occurred in the past in the naval shipbuilding industry and is looming again as a current issue (see below).

A way must be found to minimise the inevitable boom and bust cycles of defence procurement. The Defence Council accepts that defence industry must become more resilient and self-reliant (including through diversification to non-defence activities) if it is to prosper and grow in the future, but it cannot do this if Governments are not more predictable in their spending plans. Industry is no longer dependent on offsets or local quota contents as in the past. But when Government predicts strong growth projections over the decade and then resiles from them, it should not be surprised with the consequent decisions to reduce the labour force. The Defence Council recommends that the Government recommit itself to demand management and the timing of new defence projects to maintain regular work where possible.

5. The Future of Naval Shipbuilding

The future of naval shipbuilding in Australia is a special case. The Government has nominated it as a strategic industry capability. Estimates suggest that defence expenditure supports around 63% of all shipbuilding and repair work carried out domestically. Moreover, Australia is in the process of embarking upon an ambitious naval shipbuilding program with the AWDs and LHDs to be followed by the future submarines, frigates and offshore combatant vessels. This could involve building costs of at least \$40 billion, according to ASPI. If around another \$80 billion is added to this for through life-support and operating costs, this amounts to some \$120 billion of defence investment and should be sufficient to sustain a robust and innovative naval shipbuilding industry well into the 2050s, and possibly beyond.

The Defence Council endorses the Government's concern, however, that a so-called "valley of death" should not occur between the completion of the current AWDs and the commencement of the next major naval shipbuilding program. Central issues are involved here with regard to retaining crucial workforce skills. In the past, schedule delays in naval shipbuilding have occurred because of constraints on the availability of sufficient skilled defence industry workers, including specialist design, engineering and system integrators. The fact is, however, present Defence planning will not sustain our naval shipyards for the period until when the next major planned program starts. Skills and expertise built up in the last few years will again dissipate and the risk is that at least one shipyard may close. Urgent direct intervention is necessary to provide short-term naval shipbuilding work. It needs to be recognised that the capacity of the whole sector will be required to successfully accomplish the ambitious naval shipbuilding program planned by the Government for the decades ahead.

The Defence Council believes it is in the national interest to have a successful naval shipbuilding industry. In this context, we recommend that there be an independent analysis of the impact on Australia's Gross Domestic Product, our skills and employment base, and the multiplier effects in regional Australia of our future naval shipbuilding expenditure. The relevance of the broader economic implications of defence naval shipbuilding and sustainment requires this sort of detailed and independent analysis in our view. We are not suggesting here that the Government should routinely use defence projects to pursue economic outcomes, but the potential economic impact of \$120 billion of expenditure on naval shipbuilding and sustainment should receive important consideration as a future nation-building project.

6. Improving the Defence Skills Base

Industry requires early guidance on Defence's long-term plans for capability development and on specific projects to determine whether to invest in appropriate skills. Growing the capacity of local defence industry will require ongoing investment in skills development and workforce growth in a tight labour market. Defence industry is faced with an ageing demographic profile, quickly changing technology and competition for skilled workers from other areas of the economy, such as the mining and energy sectors. As the 2010 Combet Report observed: one of the challenges facing the defence industry sector in Australia is ensuring that the number and skills of the workforce match current and future demands. This has been made all the more difficult by projections that, following the 2009 Defence White Paper, there would be a sustained increase in demand for a growing defence industry workforce. That has not proven to be the case: instead, several defence prime contractors have had to reduce their workforces.

And the impact on some SMEs, which collectively account for approximately half of all employment in the defence industry sector, has been serious.

The Defence Council strongly supports the specific programmes that Defence has developed to overcome skills shortages and hence improve productivity and make companies more effective suppliers to Defence. In particular, we welcome the initiatives to improve the skills base of defence industry and promote future innovation and creativity and especially the Skilling Australia's Defence Industry program (SADI). This offers opportunities to industry to generate additional skilled positions, to raise the skill level of existing employees, and improve skills training in defence industry. It provides grants to companies for training activities where there is an identified skills shortage in technical, trade and professional skill sets, including project management, engineering, technical trades, logistics and scheduling. The long-term purpose of this program is to ensure that industry has the skills to deliver the capability required by the ADF through expanding Australia's specialised skills base, providing opportunities for rural and regional Australia (where many major ADF platforms are constructed), and enhancing opportunities for companies to participate in developing innovative defence technologies.

SADI is complemented by the Industry Skilling Program Enhancement (ISPE), which is aimed at increasing the number of potential recruits to defence industry, beginning with school students. The package has been developed in conjunction with State and Territory governments, defence industry and other agencies. It seeks to expand the pool of skilled workers from which defence industry can recruit, enhance employment and career pathways, and address specific defence industry skills gaps. The Defence Council endorses these initiatives by the Government but unless they operate in an environment of sustained predictable workflow much of the training investment will be lost.

7. The Importance of SMEs

Australian-owned defence firms are generally small to medium-sized enterprises (SMEs). They account for approximately 50% of employment, or some 15,000 people, in the Australian defence industry sector. According to the 2010 Combet Report, around one-third of Defence's spending on acquisition and sustainment goes to SMEs and there are over 3,000 SMEs in Australia's defence industry, mostly subcontractors to the primes. The Defence Council agrees that the relationship between the primes and SMEs is crucial and that Defence needs to see strong relationships between these organisations to ensure that its capabilities are developed on time and on budget. Estimates suggest that around 30% of the work that Defence sources from the eight prime contractors is subsequently contracted to smaller firms in Australia and overseas. We also agree that the

primes need to nurture and support SMEs, which are a vital source of innovation and niche capability in the local defence marketplace. Almost all prime contractors depend on SMEs to augment their capacity and complement their technical capabilities. In turn, the SMEs need a strong relationship with the primes to capitalise on the sales of their products and so sustain further innovation. However, it has to be recognised that the SMEs are the most vulnerable when challenging fiscal circumstances impact on the Defence Budget – as at present. In this context, we recognise the SMEs need to focus on areas expected to provide the most assured flow of work in current circumstances. This is most likely to be achieved by concentrating on the sustainment, support and upgrade of Defence's platforms and systems.

The Government states SMEs are important and that is why many of the industry development initiatives identified in the 2010 Combet Report are particularly targeted at SMEs. The Defence Council welcomes these initiatives, including the Australian Industry Capability (AIC) programme, which requires tenderers to provide plans that demonstrate how they will maximise opportunities for Australian companies. However, it is particularly important that these and other programs are sustained by Government in the current period of Defence budgetary restraint. Initiatives that assist SMEs to successfully compete for Defence business and which help to improve the business skills and acumen of SMEs (such as the Defence Industry Innovation Centre) are important for their continuing survival. The Defence Council considers that any measures that reduce the costs of entry into Defence business for SMEs should be in Defence's interests because SMEs have an important role in Australia's defence industrial base and many provide skills and products that are critical for the ADF.

8. A Different Approach to Defence Exports

Defence exports can improve the sustainability of local industry by creating economies of scale, defraying development and overhead costs, funding product development, and improving skills. Defence exports can also make local industry less susceptible to the inevitable fluctuations in Defence demand. However, the highly protected and artificial nature of the international defence market makes the defence export environment for Australia exceptionally risky and demanding. With some important exceptions, local companies do not tend to independently develop new products or platforms. This means that the range of potential items for export is limited compared with the major international defence exporters. As a result, Australia's share of global defence trade is far smaller than its share of world defence production. Australia's potential is further limited by the lack of economies of scale for our relatively small defence market, our poor record in developing uniquely Australian intellectual property, and the fact that Australian

defence industry capabilities are not as well known as they should be. Australian companies that do attempt to export are often faced with international competitors that are highly subsidised by their governments.

The Defence Council recognises that the Government has developed a number of programs to assist industry to compete in the global defence market, including the Global Supply Chain program to create opportunities for Australian industry in the global supply chains of overseas prime contractors and their major subcontractors. But the results so far have been disappointing. The 2010 Combat Report asserted that “lucrative opportunities” exist for Australia in competing for access to global supply chains. Unfortunately, significant budget cuts in both the US and European defence markets and technological delays with some major overseas projects have undermined the promised potential for Australia. Several Australian SMEs have suffered major setbacks to their investment plans. We should continue to pursue opportunities in the global supply chain market while recognising Australian companies will face obstacles, constraints and risks.

Therefore, the Defence Council considers it is time to look for different opportunities for defence exports with a view to focusing on our own region. In keeping with our shift in strategic focus to Asia, we consider it may be worthwhile to explore potential defence markets in Southeast Asia. We may well find export opportunities there flowing from the expertise of our defence industry in adapting, repairing and maintaining through-life defence equipment and its experience as a provider of a wide range of support services to the ADF – such as training, simulation, test and risk evaluation, logistics and garrison support. Southeast Asia is a potential market of great strategic importance to Australia. Most defence forces in the region, except for Singapore, have a poor track record in the maintenance and support of military equipment. Australia's defence international engagement with our region should now extend to defence industry cooperation, with the relationships of Australian companies through exports to the region forming part of the broader defence relationship. In this way, defence industry partnerships can complement the formal partnerships between our Defence Organisation and those of the region and deepen interoperability.

9. Implementation of White Paper Policies on Defence Industry

A new approach needs to be taken on how performance against White Paper policy statements on defence industry are to be implemented and measured. In the past, all too often statements of Government-endorsed defence industry policy have lacked sustained implementation. It is generally accepted these days that Public Policy must be supported by evidence of success over time, and corrective action taken if necessary. This may require Ministerial intervention,

but should be at least subject to regular reviews of progress. The Defence Council recommends that the DMO be required to implement a structured roadmap with evidence-based milestones for each of our policy recommendations in this submission. Progress reviews could then be undertaken jointly with the DMO and industry at regular meetings of the Defence Council with the Minister for Defence and Minister for Defence Materiel.

Conclusion

The Defence Council considers that defence industry policy now needs to be adjusted for:

- (a) **Changes** to Australia's strategic environment post-Afghanistan; and
- (b) At a time of sustained fiscal constraint industry must be able **to deliver innovation** that gives the ADF an operational edge, whilst also delivering capability to the ADF in a more cost-effective way.

Our changed strategic circumstances and the importance of our region of primary strategic concern dictate giving priority to ADF requirements with regard to our unique operating environment. There is an urgent need to identify potential deficiencies in our current industry capabilities in this regard.

Critical capabilities must be capable of rapid adaptation and technological innovation to meet changing threats. But innovation should also include finding more innovative ways of delivering and sustaining military capabilities that can protect the availability of such capabilities, but drive down costs. In these difficult economic times, it is appropriate to examine the ways in which industry can be involved more closely with Defence to bring about more efficient and effective ways of doing business. All aspects of achieving defence capability delivery and sustainment in a more cost-effective way should therefore be open to constructive debate and challenge, both within industry and Defence itself.