



**DEFENCE WHITE PAPER
&
DEFENCE CAPABILITY PLAN
OPPORTUNITIES FOR NT INDUSTRY**

Peter Smith

7 September 2009

Contents

Welcome	4
Disclaimer.....	4
AiG Defence Council.....	4
Understanding the Defence Document Relationships	4
The 2009 White Paper (and 83 Media Releases).....	5
AiG’s Views on the 2009 White Paper	6
A Personal View of the White Paper.....	6
An Overview of the White Paper from an Industry Perspective	7
Self Reliance	7
ADF Roles	8
Forward Operating and Mounting Bases.....	8
ADF Capabilities	9
General Comments on 2009-2013 DCP	9
Shorter Timescale	10
Less Data on Values	10
Possible Industry Roles	10
Timing of First Pass and Second Pass (Year of Decision) Approvals	10
More Reliable Information.....	10
DCP Planned Expenditure	10
Aerospace	10
Maritime	10
Vehicles and Land	11
Electronics.....	11
DCP Projects with NT Potential.....	11
Naval Capabilities.....	11
Sea Projects of potential interest to NT industry.....	11
Sea 1180 Replacement of Armidale Patrol Boats, Minehunter Coastal and Hydrographic Ships. ...	12
Sea 1442 Maritime Communication Modernisation Phase 4.....	12
Air Superiority	13

White Paper and DCP Implications for NT Industry

Air Projects of Potential Interest to NT.....	13
Air 5405 Replacement Mobile Regional Operations Centre.....	13
Air 5428 Pilot Training System.....	13
Air 5431 Air Traffic Management & Control System Phase 2.....	14
Air 6000 F.35 Joint Strike Fighter.....	14
Air 7000 Maritime Patrol Aircraft.....	14
Air 8000 Battlefield Airlifter.....	15
Land Forces.....	15
DCP Land Projects of potential interest to NT Industry.....	15
Land 17 Artillery Replacement.....	15
Land 53 Night Fighting Equipment Phase 1BR.....	16
Land 75 Battlefield Command Support System.....	16
Land 112 ASLAV Enhancement Phase 4.....	16
Land 121 Phase 4.....	17
Land 125 Soldier Enhancement Phase 3A.....	17
Land 155 Enhanced Gap Crossing Capability.....	18
Land 998 Aviation Fire Trucks.....	18
Joint Projects.....	18
JP 2025 Jindalee Operational Radar Network Ph 6.....	18
JP 2048 Landing Craft Phases 3 and 5.....	19
JP 3021 Joint Combined Training Capability (JCTC).....	19
Information Superiority.....	19
Logistics Transformation.....	19
Remediating the Defence Enterprise Backbone.....	21
Remediating the Defence Information Environment.....	21
Conclusions.....	21
Appendix 1 Priority Australian Industry Capabilities.....	22

Welcome

Ladies and Gentlemen, thank you for coming. I know many of you from my previous activities in Darwin, and admire the work done by AIDN NT and the Defence Support Division of DBE. I believe Darwin is one of Australia's key national assets for the Twenty-First Century, whether we're talking about Defence, National Security, Energy, Mining, Tourism, or access to Asia. In addition to the enthusiasm and capabilities of Territorians, you have three things going for you – Location, Location, and Location. Nobody can take that away from you, and strategists are starting to recognise this fact.

Disclaimer

Let's be clear about one thing – unless I say otherwise, the views expressed in this presentation are my own, often influenced by others, but if you want to blame anybody for what you believe are errors or omissions, blame me.

AiG Defence Council

Before I get to the detail of the White Paper, the Defence Capability Plan and Opportunities for Business, I'd like to pay a brief tribute to the Australian Industry Group and its Defence Council. For more than 25 years, it has been arguably the principal Australian industry voice on Defence matters, putting industry's views to Government, always thoughtfully, sometimes forcefully.

I've had the pleasure of being a member of the Defence Council's National Executive for almost 20 years, and I can tell you that it is uniquely a forum in which the CEO's of all Australia's major defence companies and specialist SMEs can debate industry's views on Defence policy at a strategic level and reach an informed consensus. It is also regularly used by Ministers and senior defence and DMO representatives to debate with industry as a group and test views in a secure Chatham House environment.

It's a policy forum, debating the big issues confronting, Defence Industry in its relationships with the Government, the ADF and DMO and rarely gets into detail, but without the right policies there will be less participation in projects, so they provide critical "top cover" for all of us in Industry.

Without the AiG Defence Council, the Defence industry policy debate in Australia would be more fragmented and less effective. AIDN, of which many of you are members, is represented on the AiG Defence National Executive, and we need to make sure that the communications lines ensure that AIDN NT members get timely and accurate information on policy matters which affect this region.

Understanding the Defence Document Relationships

My apologies to the Defence industry professionals in the audience for this diversion, but a number of the people attending today are not in the mainstream of defence industry and a quick summary of the key documents may be helpful to them.

White Paper – 20 year timescale: This is the longest term and most broadly based document, looking out a generation to predict our strategic environment and our response to it. It identifies capabilities in generic terms, with little detail of value or timescales, and talks of defence industry in terms of policy, not detailed practice. In future, it will be published every 5 years.

Defence Capability Plan – 5 year timescale: Published every two years, the DCP provides a relatively detailed overview of every new major project (or new phases of existing projects) being considered within Defence to enhance ADF capability, but as yet unapproved, and scheduled to go up for first or second pass approval by the end of 2012/13. Produced by the Capability Development Executive with assistance from the Defence Materiel Organisations, it gives an informative overview of the type of capability, timescale, ROM value, phasing, and potential Australian industry involvement categories. Few other nations or industries get this depth of customer visibility on forthcoming needs.

Defence Budget – 1 to 3 year timescale: Part of the overall commonwealth Budget process, this provides detailed expenditure expectations for the next financial year on current projects, projects expected to be approved in the forthcoming year, infrastructure, industry development, etc. It also provides general guidance out three years. The Budget takes the probabilities of the DCP and turns them into near certainties (subject to approval).

Defence Industry Policy: This is an intermittent document, last published in 2007, and before that in 1998. It spells out in detail the Government's approach to Defence Industry. Some of the interface issues with DMO are covered in the Mortimer Report, but it is understood that Minister Combet is considering whether an update of the 2007 document may be appropriate.

Looking at it another way, you get the following perspective on forward opportunities:

1 to 3 years: High visibility and high funding probability, from Budget and DCP.

2-5 years: Good visibility and moderate possibility, primarily from DCP

6-20 years: Indicative, based on White Paper.

Today, I'll be talking mainly about the White Paper and the DCP.

The 2009 White Paper (and 83 Media Releases)

Another word of explanation – reading the 140 pages of the White Paper is not enough; accompanying it are 83 Media Releases, many of which contain useful amplifying material, and to fully understand the government's policy and implementation strategies, you need to read them all. In areas which I was reviewing for clients, such as Northern Australian Basing, Infrastructure,

Logistics, SME Industry, and Unmanned Systems, almost invariably I found in Media Releases extra detail which helped quantify and timescale the general principles set out in the White Paper itself.

And, of course, the White Paper is the top of the hierarchy chain, so you expect the detail to come lower down – in the DCP, the Budget, and project-specific announcements.

AiG's Views on the 2009 White Paper

In general, Australian industry welcomed the White Paper and the industry opportunities implicit in the \$100 billion of expenditure, much of it on new equipment and its sustainment.

The Defence White Paper was described as “a new economic stimulus package” by Heather Ridout, Chief Executive Australian Industry Group.

“The Defence White Paper gives Australian defence companies the ability to plan for the future with more certainty which will be good for jobs and investment in skills, infrastructure and innovation,” Heather Ridout said.

“The White Paper foreshadows expenditure of more than \$100 billion over the next decade to improve the capacity of the Australian Defence Force (ADF) to meet an array of future security challenges.

“Australian-based defence companies have over many years developed world-class skills and technologies and this military upgrade offers substantial opportunities for them.

"For broader Australian industry the Defence blueprint is a major additional economic stimulus package. This long term spending commitment will make a big contribution across the Australian economy for businesses and employment in fields such as manufacturing, construction, engineering and ICT.

“Ai Group, and the Ai Group Defence Council which represents major defence contractors and defence SMEs in Australia, will be looking to the Federal Government to deliver on its earlier commitment for some 60 to 70 per cent of the new defence expenditure to occur within Australia.

"In this context, the Prime Minister’s comments are most welcome. Australian based companies need to be given fair and open access to any new contracts,” Heather Ridout said.

In addition, AiG Defence Council National Executive Chairman, Paul Johnson, said: “The White Paper is consistent with the direction in defence procurement called for by Australian industry and reflected in the Mortimer Review, including a much more commercial approach to capability acquisition and reforms to deliver improved procurement processes within Defence”.

A Personal View of the White Paper

I agree with both Heather and Paul, but with qualifications. I certainly agree that this is a long sighted document which identifies many new capabilities and upgrades required for Defence and the ADF.

These represent major opportunities if used innovatively by the Government to maximise benefits to Australia, broadly defined, as they were in the 1987 White Paper which profoundly changed Australian Defence Industry for the better.

I have said publicly before that I regard the early chapters of the White Paper as being amongst the best and most sustained analysis of Australia's defence posture I've seen since the 1987 White Paper:

- starting from an appreciation of Australia's future strategic environment,
- leading to an outline of our strategic response,
- outlining what role the ADF will be required to play,
- defining a force structure appropriate to that role, and
- outlining the capabilities required by that force to undertake those roles.

But, as I've also said before, that's Chapters 1 to 15, and unfortunately I regard Chapters 16 and 17 on Defence Materiel, Defence Industry and Defence Science as being the weakest in the document.

Unlike the earlier chapters, we don't get past the initial statement of principles into an amplification of actions to be taken to turn those principles into practice. I have a concern that our corporate memory in terms of past successful initiatives to maximise the national benefits of a healthy and sustainable defence industry is fading, and that the more challenging, but potentially more rewarding options, are not being given the opportunity for robust debate.

To take a specific example, while we see that "Defence will seek to maximise the spending in local defence industry", we also read "Defence should not pay a premium for local industry work unless the costs and risks of doing so are clearly defined and justifiable in terms of strategic benefits". This is not exactly an invitation to seek "nation building" opportunities or to treat the major defence expenditure commitment as "a new economic stimulus package". Recent history indicated the default is usually to conservatism when it comes to implementation of such policies.

An Overview of the White Paper from an Industry Perspective

Let me turn now to the White Paper and give you my view of how its strategic directions create potential opportunities for Australian Defence Industry, and NT industry in particular.

Self Reliance

The Government has decided in the White Paper 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, but with a capacity to do more when required, consistent with those strategic interests that we might share with others, and within the limits of our resources.”

ADF Roles

Flowing from that basic principle, the White Paper then defines ADF priorities:

- “The principal task for the ADF is to deter and defeat armed attacks on Australia by conducting independent military operations without relying on the combat or combat support forces of other countries. This means that the ADF has to be able to control our air and sea approaches against credible adversaries in the defence of Australia, to the extent required to safeguard our territory, critical sea lanes, population and infrastructure.
- “After ensuring the defence of Australia from direct attack, the second priority task for the ADF is to contribute to stability and security in the South Pacific and East Timor. This involves conducting military operations, in coalition with others as required, including in relation to protecting our nationals, providing disaster relief and humanitarian assistance and, on occasion, by way of stabilisation interventions.
- “The next most important priority task for the ADF is to contribute to military contingencies in the Asia-Pacific region, including in relation to assisting our Southeast Asian partners to meet external challenges, and to meeting our alliance obligations to the United States as determined by the Australian Government at the time. The strategic transformation of the region will mean that Australia should be prepared to make contributions - including potentially substantial ones - to such military contingencies in support of our strategic interests.
- “Finally, the ADF has to be prepared to contribute to military contingencies in the rest of the world, in support of efforts by the international community to uphold global security and a rules-based international order, where our interests align and where we have the capacity to do so. “

Forward Operating and Mounting Bases

Let me turn now to the first implication for the Northern Territory and NT industry.

If Australia is to be both self reliant and a significant contributor to regional stability, it needs forward bases from which it can operate in the defence of Australia or mount regional operations. And Darwin is one of the two chosen locations. As the White Paper says:

“We need to maintain a strong capability to project military power from mounting bases and forward operating bases in northern Australia and, if required, from strategically significant offshore territories, which have enduring defence value. Our expansive strategic geography requires an expeditionary orientation on the part of the ADF at the operational level, underpinned by requisite force projection capabilities. “

“Darwin and Townsville remain critical ports for operations in the defence of Australia and in our immediate neighbourhood”

Implications for the NT

You can expect that facilities in the NT, particularly at Darwin and Tindal, will go through continuing upgrades to match the needs of the growing ADF capabilities. Already there is activity at Tindal to allow AEW&C aircraft to operate there, and upgrades at Darwin to allow the LPHs to operate, but these are just the beginning of twenty years of planned enhancement.

ADF Capabilities

The Government has decided that Defence should focus on developing a force that meets the primary obligation to deter and defeat attacks on Australia. This entails a fundamentally maritime strategy, for which Australia requires forces that can operate with decisive effect throughout the northern maritime and littoral approaches to Australia, and our military strategy will be principally by way of sea control and air superiority.

The White Paper says “As a result of these priorities, the ADF of 2030 will need to be a more potent force in certain areas, particularly:

- undersea warfare and anti-submarine warfare (ASW),
- surface maritime warfare (including air defence at sea),
- air superiority,
- strategic strike,
- special forces,
- Intelligence Surveillance and Reconnaissance (ISR), and
- Cyber warfare.

“It is the Government's judgement that these are the crucial areas which require particular attention to secure our unique strategic interests. “

General Comments on 2009-2013 DCP

Let me turn now to the Defence Capability Plan. This is the document, nominally released every two years, which gives industry a detailed overview of the major new projects moving towards approval. We are fortunate in Australia that this level of detail is provided – probably greater than anywhere else.

There have been significant changes in the DCP format, and there is a general consensus among informed industry observers that the new DCP is a more user friendly document than any of its predecessors.

It is a more detailed document and provides industry with significantly more detail of the nature and timing of potential local involvement than past DCPs. To summarise some of the changes:

Shorter Timescale

The issue of the reduction in timescale of the DCP from 10 years to 5 years is largely a non-issue. In fact, the four year limitation is only on first consideration of a project, and many of them are not scheduled into service until 2017 and beyond. There is enough data in the DCP for realistic strategy development.

Less Data on Values

This is a more significant concern, particularly on larger projects. The use of bands can be quite misleading, e.g. JSF is shown as “greater than \$1.5B”; it is, by a factor of 10, at \$15B. For smaller project, the problem is not as great, as an indication is always given of where in the band the project will fit, e.g. “\$100M to \$500M, towards the lower end of the band”.

Possible Industry Roles

The tabulation for each project of desirable and optional local participation roles is much more detailed than in past DCPs and links closely to the new PICs.

Timing of First Pass and Second Pass (Year of Decision) Approvals

These are included for the first time and give a useful indication to industry of the timescales in which they will be responding to initial Requests for Information and later Requests for Tender. This is important as most NT industry will be looking to team as subcontractors with larger Primes.

More Reliable Information

The shorter timescale and smaller number of projects provides a more reliable basis for projecting potential activities. An analysis of earlier 10 year DCPs revealed that 90% of Project for decision in the last 7 years of the DCP were either deleted (35%) or significantly delayed (65%) so their presence was aspirational not operational.

DCP Planned Expenditure

The four year projections of expenditure in local industry 08/09 to 12/13 are included in the DCP for the first time and indicate the following:

Aerospace

There will be relatively little new aerospace activity until the medium terms when major projects such as F.35 Joint Strike Fighter impact industry workload.

Acquisition – significant decline average \$0.25B pa

Sustainment – modest growth average \$0.9B pa

Maritime

Maritime expenditures in local industry will remain healthy, primarily due to Air Warfare Destroyer, and to a lesser extent, to the Amphibious Ship.

Acquisition – significant growth average \$0.6B pa

Sea 1180 Replacement of Armidale Patrol Boats, Minehunter Coastal and Hydrographic Ships.

This is a long term project to rationalise the RAN fleet by replacing three types with one common platform, utilising specialised modules for specific roles.

At the moment, the concept has been approved, but any detail could be several years away.

The Vessels are very significantly larger than Armidale (2,000 tonnes vs 360 tonnes), but modules could fall within the capabilities of NT industry.

The larger vessels are unlikely to be able to use existing Patrol Boat facilities in Darwin and a major infrastructure upgrade or replacement would be required, again providing industry opportunities.

First Pass Approval	2012-2015
Year of Decision	2018-2021
Initial Capability	Beyond 2019
Value	\$1.5B plus

Sea 1442 Maritime Communication Modernisation Phase 4

This is a continuing phase of the project to enhance the Maritime Tactical wide Area Network by extending it to ships not previously equipped, with possible replacement of radios, antennas and other comms systems.

If the Armidale fleet is to be included (not clear at this time) it is likely the work would be done in Darwin. Although this does not fall within Armidale TLS, it would be expected that DMS will bid to be Prime Systems Integrator.

A number of NT firms would have subcontract capability.

First Pass Approval	2009-2011
Year of Decision	2012-2015
Initial Capability	2014-2016
Value	\$250M

Air Superiority

The directions of the RAAF have previously been well defined, and the White Paper confirms a requirement for air superiority, maritime strike, long-range strategic strike, offensive air support and close air support.

Most of these capabilities have already been identified, e.g. JSF, AEW&C, MRTT, and procurement is under way.

Air Projects of Potential Interest to NT

These are aviation projects in the 2009 Defence Capability Plan which have not yet received final approval, including aircraft, helicopters and some ground equipment. They include Air Force, Army and Navy projects. Facilities, infrastructure and training cost are included, but not shown separately. The list is restricted to those projects which involve basing of equipment in the NT and/or those likely to provide opportunities within the capabilities of NT industry

Air 5405 Replacement Mobile Regional Operations Centre

This is a deployable air defence command and control system, and will replace the current one in Darwin. The basic deployable shelters could be manufactured in Darwin, and potentially the operational systems could be installed and tested there.

The timing has slipped significantly compared with the 2006 DCP.

First Pass Approval	2011-2013
Year of Decision	2013-2016
Initial Capability	2016-2018
Value	\$200M

Air 5428 Pilot Training System

This is the project to consolidate all ADF pilot training, and may involve relocation away from current bases. Darwin could be a contender, but probably is disadvantaged by The Wet which would restrict training in summer months.

The timing has slipped slightly from the 2006 DCP.

First Pass Approval	2009-2011
Year of Decision	2013-2015

Initial Capability 2015-2017

Value >\$1.5B

Air 5431 Air Traffic Management & Control System Phase 2

This project includes the replacement of ATC Radars at Tindal and Darwin. NT firms are likely to be capable of site works and installation activities.

First Pass Approval 2010-2012

Year of Decision 2011-2013

Initial Capability 2013-2015

Value \$400M

Air 6000 F.35 Joint Strike Fighter

The RAAF Joint Strike Fighter project continues to be the RAAF's highest priority, but has slipped by about 2 years. One squadron will be based at RAAF Tindal, and on current timing this will be 2018 to 2019.

There will be significant opportunities for NT firms involved in infrastructure development and facilities, bidding to Defence. There may also be aircraft and maintenance systems opportunities for aircraft and systems support. This bidding will be to Lockheed Martin which will have the TLS contract.

First Pass Approval Complete

Year of Decision 2009 - 2011

Initial Capability 2017 - 2019

Value \$A 15B

Air 7000 Maritime Patrol Aircraft

This is the project to replace the A/P.3C Orion with the Boeing P.8 Poseidon which is under development for the USN. The primary aircraft base will be RAAF Edinburgh in SA, but a small contingent will probably be stationed at Darwin (as currently happens with Orion) for northern maritime surveillance.

The P.8 project has slipped by two years from the original schedule, and this may cause issues regarding the sustainability of ageing Orions.

The complementary requirement for a high altitude surveillance UAV has slipped outside the DCP decision timescales.

First Pass Approval Complete

Year of Decision	2013 - 2016
Initial Capability	2017 - 2019
Value YOD 2014	>\$1.5B

Air 8000 Battlefield Airlifter

This is a requirement for a small number (8) of transport aircraft smaller than Hercules for intra-theatre and regional airlift. Some of the aircraft may be stationed in Darwin to support 1 Brigade. The Italian C.27J is the favoured type. NT industry should be capable of maintaining such an aircraft.

First Pass Approval	2010 - 2012
Year of Decision	2012 -2015
Initial Capability	2014 - 2016
Value	\$A 1.5B

Land Forces

The concept of a Hardened, Networked and adaptive Army continues as the baseline, consisting of infantry, armour, artillery, combat engineers, and aviation which are able to operate as combined-arms teams, able to defeat incursions onto Australian territory and potentially undertake amphibious manoeuvre, and stabilisation and reconstruction operations in our immediate neighbourhood.

While the majority of the Army's armoured vehicles and air assets are already in service or in the procurement chain, there will be continuing opportunities to upgrade capabilities. There will also be significant opportunities in the networking of the Army (as well as the larger goal of networking the entire ADF) and in improving the equipment and support available to individual soldiers.

DCP Land Projects of potential interest to NT Industry

The DCP has future Army projects including vehicles, battlefield management systems, communications and artillery. Facilities, infrastructure and training cost are included, but not shown separately. The list is restricted to those projects which involve basing of equipment in the NT and/or those likely to provide opportunities within the capabilities of NT industry.

Land 17 Artillery Replacement

This project involves new towed and self propelled 155mm guns, some of which may be located in Darwin with 1 Brigade. They are likely to be bought MOTS from overseas. NT firms may become involved in support, particularly of the vehicles.

First Pass Approval	Complete
Year of Decision	2009 - 2011
Initial Capability	2012 - 2014
Value	>\$1.5B

Land 53 Night Fighting Equipment Phase 1BR

This phase augments existing night vision goggles, night weapons sights and aiming devices as they reach the end of their service life. 1 Brigade uses some of the existing equipment.

The intent is to acquire through overseas MOTS but sustain Australian through-life-support capability.

First Pass Approval	2011 – 2013
Year of Decision	2013 – 2016
Initial Capability	2014 – 2016
Value	\$400M

Land 75 Battlefield Command Support System

This project, being run in conjunction with Land 125 (Soldier Enhancement) and the combined projects are informally referred to as Land 200.

Currently, DMO is reviewing an offer by ELBIT for the Battlefield Management systems element, all other competitors having been eliminated.

At least one NT electronics company is regarded as having capability to support Land 75.

First Pass Approval	Completed
Year of Decision	2009-2011
Initial Capability	2010-2012
Value	\$350M

Land 112 ASLAV Enhancement Phase 4

This is a continuing upgrade program for ASLAV vehicles, with General Dynamics Land Systems regarded as the favoured contender, having supplied the vehicles.

Previous phases have been undertaken by GDLS both in Adelaide and Darwin. A number of NT companies have capabilities suitable to undertake subcontracts to GDLS.

In parallel, GDLS and others are bidding for Through Life Support of ASLAV and Abrams tanks. The TLS and Upgrades are likely to be done in conjunction, making attracting GDLS to centre this work in Darwin a key NT Military Vehicles Strategy

First Pass Approval	Complete
Year of Decision	2011-2013
Initial Capability	2014-2016
Value	\$250M

Land 121 Phase 4

This is the phase of Land 121 which proposes to replace up to 1,300 ageing unprotected Landrovers with a Light Protected Military Vehicle. While Australia has joined the similar US Joint Light Tactical Vehicle project, an Australian designed option is to be explored as well.

Whatever vehicles is chosen, a high level of Australian assembly, installation and through-life support is ranked as “Desirable” in the DCP. Thales and GDLS have already declared their intention to bid and are holding subcontractor briefings.

This relatively small vehicle is well suited to NT industry capabilities.

First Pass Approval	Complete
Year of Decision	2012-2015
Initial Capability	2016-2018
Value	\$1.5B +

Land 125 Soldier Enhancement Phase 3A

This project, being run in conjunction with Land 75 (Battlefield Command Support System) and the combined projects are informally referred to as Land 200.

Currently, DMO is reviewing an offer by ELBIT for the C4I systems element, all other competitors having been eliminated.

At least one NT electronics company is regarded as having capability to support Land 125.

First Pass Approval	Complete
Year of Decision	2009-2011
Initial Capability	2010-2012
Value	\$200M

Land 155 Enhanced Gap Crossing Capability

This is a mid-term requirement for new bridging systems to replace ageing current ones.

The likely acquisition strategy is not clear at this time, but the DCP places strong emphasis on TLS. As a significant proportion of the bridging would be associated with h1 Bde in Darwin, the opportunity for NT metal fabricators to provide subcontract is available.

First Pass Approval	2011-2013
Year of Decision	2013-2016
Initial Capability	2016-2018
Value	\$200M

Land 998 Aviation Fire Trucks

Another mid-term requirement likely to be satisfied by adapted COTS vehicles.

A number will be stationed at RAAF Darwin and RAAF Tindal, so NT heavy vehicle maintainers should have elements of TLS capability.

First Pass Approval	2011-2013
Year of Decision	2013-2016
Initial Capability	2016-2018
Value	\$200M

Joint Projects

These are projects potentially involving more than one user service, or where one service provides capability for another (e.g. RAN amphibious ships to lift Army equipment). Facilities, infrastructure and training cost are included, but not shown separately. The list is restricted to those projects which involve basing of equipment in the NT and/or those likely to provide opportunities within the capabilities of NT industry.

JP 2025 Jindalee Operational Radar Network Ph 6

This is a further phase in the updating of the JORN Network, including the development site near Alice Springs operated by BAES. Details of the upgrade are not yet known, but NT firms may get involved in civil works and equipment installation.

First Pass Approval	2011 - 2013
Year of Decision	2013 - 2016

Initial Capability	2016 - 2018
Value	\$300M

JP 2048 Landing Craft Phases 3 and 5

These phases provide landing craft of various sizes to operate with the new RAN LHD Amphibious Ships, and will use the upgraded port facilities at Darwin. Particularly the smaller vessel (Phase 3) will have modules and systems within the capability of NT firms.

	Phase 3	Phase 5
First Pass Approval	Complete	2012 - 2015
Year of Decision	2011 – 2013	2015 - 2018
Initial Capability	2014 – 2016	Beyond 2019
Value	\$250M	\$700M

JP 3021 Joint Combined Training Capability (JCTC)

This is a new phase of development of the joint AUS/US training facilities at Bradshaw, Delamere and Shoalwater Bay (Qld) to allow training on EW systems and responses to EW threats. Some NT firms may have capabilities for installation and maintenance.

First Pass Approval	2010 - 2012
Year of Decision	2012 - 2015
Initial Capability	2013 - 2015
Value	<\$100M

Information Superiority

Networking the ADF to achieve information superiority continues to increase in importance, and the Government's goal in the White Paper is "ISR capabilities, intelligence collection and assessment systems, space-based surveillance systems including intelligence collection satellites, cyber warfare, EW, strategic communications, and battlespace management and command support systems which constitute an information superiority capability. This is required to give our forces a winning edge in comprehensive situational awareness, rapid decision making, networked capabilities, and the precise application of force."

Logistics Transformation

According to the White Paper, there will be a dramatic transformation in logistics and warehousing practices.

In a Media Release accompanying the White Paper, the Minister for Defence announced that:

“The Government will make a significant investment to replace outdated warehousing facilities, and consolidate Defence’s 24 wholesale warehouse and distribution sites to seven.

“The Government will deliver modern, purpose built facilities employing efficient, best practice processes and technologies. This will result in significant reductions in management overheads and efficiencies through improved inventory management.

“The future Defence storage and distribution network will be streamlined to closely align with Australia’s transport network with the seven major sites being located at Darwin, Townsville, Amberley, Bandiana, Edinburgh, Perth and Moorebank, and supported by seven specialist logistics units.

“The current storage and distribution system has suffered from years of underinvestment, operates with outdated infrastructure, is not enabled by industry standard technology and automation, incurs relatively high costs and can not deliver efficient outcomes in line with commercial best-practice.

“Defence will pursue the most cost-effective procurement of new infrastructure and services, and develop a final proposal for Government consideration later this year.

“Once approved, construction of the new network is planned to commence in 2013/14.”

Implications for NT

The implications for the Northern Territory are very significant:

- It will become a “mega” logistic centre, undoubtedly requiring the construction of a major new warehousing complex with multi-modal transportation linkages.
- It will employ more ADO people in an enlarged logistics unit.
- It will probably be the subject of a completely new contracting, management and operations arrangement. Expect consideration of PPP and an approach more aligned to supermarket distribution than traditional defence practices.
- It should create increased opportunities for NT industry in logistic support.

This is unlikely to appear in the DCP, because it is a sustainment activity and likely to be contracted via DSG.

It’s a Biggie, and the decision timescale for preferred options is early, so NT civil engineering, construction and logistics firms ought to be getting active and organised ASAP.

Two generic areas requiring remediation are addressed by the Government in the White Paper and provide opportunities for industry, including companies not necessarily part of the “traditional” Defence industry.

Remediating the Defence Enterprise Backbone

According to the White Paper, approximately \$6 billion will be spent over the next decade to address what the Government calls the “hollowness and degradation in the Defence enterprise backbone”. The remediation will address deficiencies in critical areas such as:

- storage and loading facilities at ports,
- technology upgrades for key Defence research facilities,
- vehicle maintenance facilities,
- airfields and training ranges, and
- fuel and weapons storage.

Implications for NT

The warehousing restructuring just mentioned will be part of this, as are the earlier announcements regarding the Port, but expect much more to happen in the NT.

Again, this is likely to come out via DSG.

Remediating the Defence Information Environment

The Government has committed in the White Paper to the remediation of the Defence Information Environment and infrastructure. The Government will improve Defence’s computer systems to deliver more integrated capabilities such as the automation of procurement, personnel and pay administration, vetting, recruitment, estate management and reporting will be progressively introduced.

Implications for NT

While this will be managed centrally, there will inevitably be a requirement for IT support activities in each region, and with the NT and Darwin continuing to increase in importance and activity, this is going to cause increased demands on NT IT companies and probably the likelihood of major IT companies setting up or expanding NT branches.

Conclusions

My personal conclusions re the White Paper and the DCP are as follows:

- The White Paper provides all Australians with a strategic overview of why, where and how we will operate the ADF to defend Australia and its interests. However, it is short on detail about industry’s role.
- The DCP gives appropriate detail for industry to understand future projects, and to some extent the potential for Australian industry involvement.
- A fresh look at Australian Industry Policy and Practices is needed.
- There is major potential for NT industry if it is pro-active and organised.

Appendix 1 Priority Australian Industry Capabilities

For completeness, this is a listing of the recently listed PICs with some preliminary comments on potential for NT industry. As these are the technologies and capabilities into which Defence will provide funding to sustain in-country capability, it is important that the NT ensures that ADF/DMO decision makers are aware of NT capabilities.

Electronic Warfare

This is a highly specialised industry activity, largely centred in Adelaide where industry can interface with the DSTO EW Division and the ADF's Joint EW facility. Main industry prime involved is BAES; there are smaller specialised companies, e.g. Avalon systems.

There is probably little chance of NT involvement, except possibly tropical trials.

High Frequency and Phased Array Radars

This PIC includes JORN, and also includes the Jindalee/JORN development facility near Alice Springs operated by BAES for the RAAF, so NT involvement will continue.

Complex Systems Integration

This capability relates to the ability to integrate complex systems on ADF platforms, and involves large scale electronic systems and software integration. BAES, Boeing and Raytheon are the main primes, with Thales, CSC and SAAB on the second level.

The overall system integration task is beyond the current capabilities of NT industry, but some specialised electronic systems and software companies could become subcontractors. North Australian Technologies is in this category.

Through Life Support of Mission Critical software

This also involves a high level of assured software development and is usually the province of Primes for major systems, particularly BAES, Raytheon, Thales, CSC and SAAB.

NT industry has the opportunity to become involved on the software systems in platforms based in the NT, including the Abrams tanks, ASLAVs and Armadales as their onboard electronic systems are upgraded. The Tiger helicopter software is more complex and may be a challenge.

Anti Tampering Capabilities

This is about unauthorised access to systems, including computers and software, and is a growing field.

There is at least one small NT company in the field – Data Protection Services.

Signature Management

This is a growing field of coatings and shape design to absorb sound, radar and infrared frequencies.

DSTO in SA is leading local activities, and no current NT activity is known.

Support of Collins Combat system

Highly specialised and restricted to Raytheon.

No NT opportunity.

Acoustic Technologies and Systems

This focuses particularly on underwater technologies, e.g. sonar and fixed monitoring arrays. Australian primes include Thales, Ultra and L-3 Nautronix, with DSTO also active.

NT involvement may be by way of warm water testing. There are already some systems in service in the vicinity of the NT.

Dry Docking & Common User Facilities

One specific requirement is for patrol boat docking facilities in Northern Australia. While Darwin already has facilities for Armidale, its long term replacement by a 2,000 tonne vessel (8 times its size) may cause a new requirement.

RANms and DMS are the logical NT-based industry candidates.

Selected Ballistic Munitions & Explosives

Thales exclusive.

No NT opportunity.

Infantry Weapons

Virtually a Thales exclusive.

No NT opportunity.

Combat Clothing and Personal Equipment

This relates to commercialisation of DSTO developments for signature reducing characteristics.

NT opportunity could come in tropic testing if it can convert DSTO away from North Queensland.

